

IDRC Connectivity and current Uganisha activities

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Appendix 1: Inventory of IDRC connectivity activities

Program Initiatives: Acacia, ASPR, CFP, CBNRM, EcoHealth, LCA, MIMAP, Minga, PAN, PBR, PLAW, SMMEIT, SUB, TEC

Secretariats: ATPS, Bellanet, EEPSEA, EMS, EHIP, Foodlinks, IMFNS, INBAR, MPRI, MI, OCEEI, SIFR, VEEM, TIPS

Corporate Services Branch units: EU, PBDO, PA, RIMS, SIP

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Regional Offices

Appendix 2: Inventory of Uganisha assistance

Appendix 3: Inventory of connectivity activities of IDRC projects

Summary of Recommendations

- ▶ that the current Internet strategy coordinate with the overall communication strategy for the Centre.
- ▶ that the local hosting of web sites should be encouraged and that if hosting on remote server is a necessity, sites should be created and managed by local staff if possible.
- ▶ that coordination among the sites be increased.
- ▶ that the use of open standards for information management and retrieval should be investigated, developed and coordinated.
- ▶ that as the IDRC Internet presence becomes more distributed, a multi-site search engine be obtained
- ▶ that the management of some types of information should be further centralized.
- ▶ that the roles and responsibilities of staff be clarified; e.g., web site managers, staff managing centralized content, staff managing the corporate site, and staff providing advice and support.
- ▶ that the contracting out of web work be coordinated.
- ▶ that policies and guidelines for web site management be reviewed and updated.
- ▶ that all web sites produced by IDRC projects acknowledge IDRC support; that projects recipients be encouraged to publish research results on their own web site; and that there be a mechanism for coordinating information on project web sites
- ▶ that, periodically, there be a comprehensive review of web site statistics.
- ▶ that training requirements be frequently reviewed and appropriate training provided.
- ▶ that subsets of IDRIS/RADIUS records be accessible so that the need to create text lists of projects on each PI web site be eliminated.
- ▶ that all full text documents and images be systematically collected by the IDRC Archives.

- ▶ that, currently, video and audio conferencing are not recommended for general use.
- ▶ that the purpose of mailing lists be clearly defined.
- ▶ that, currently, multimedia is not recommended for general use.
- ▶ that there be coordination of the many systems that exist or are being developed to manage (1) project information, (2) bibliographic databases, (3) documents, (4) mailing lists, (5) lists of related sites, (6) interactive systems, and (7) intranet sites.

Introduction

Uganisha is a 2 year project which started in April 1997. The Uganisha project was established to "expand the use of electronic venues (e-mail, Internet) in project development and implementation, focussing on enabling the connectivity of the IDRC community and greater information access, exchange, and dissemination and workgroup collaboration. It aims at improving the efficiency and effectiveness of program groups in their capacity to deliver research programs, products, and services through active networking. It will provide for a common experience in establishing connectivity and develop best practices for networking. Project activities will include needs analysis; technology surveys; software evaluation and adaptation; technical experiments; training courses; and support for IDRC recipients and partners in building their capacity in using computer networks." (RADIUS)

The Uganisha project provides subsidies, technical advice and support, training assistance and technology reviews to IDRC project recipients. It also assists IDRC Program staff with connectivity activities.

At the beginning of the Uganisha project, it was found that Program Officers were interested in being able to take advantage of collaborative Internet technologies. Often, however, they were unaware of what options were available to them and what connectivity activities were being carried out by other IDRC staff and projects.

The goals of this report are to increase staff awareness of what others are doing, how they are approaching connectivity, and what the connectivity issues are. To accomplish this, this report provides a snapshot of the current connectivity activities of IDRC and its Secretariats and projects. The review includes an examination of web sites and connectivity plans (including Prospectuses and pre-project summaries), an inventory of Uganisha assistance to date and the results of consultations with many IDRC staff (mainly web site managers, Uganisha staff and some of the Internet Working Group). The focus of this report is on the individual web sites. A review of the technical management of the IDRC presence (IDRC Internet server and software) is not included in this report. The report includes recommendations for the Internet at IDRC.

Uganisha is producing a separate report for Program staff, "A Survey of Collaborative Internet Technologies". That report covers a wide variety of Internet systems and utilities that Program Initiatives and IDRC project recipients could consider using.

As well as knowing what technologies are available, there are a number of issues that should be addressed when adding connectivity components to a project. These issues are included in this report along with an outline of the process that a project has to go through in order to get connected and an outline of what types of communications are possible with varying levels of connectivity.

The term "connectivity" is used in this report to mean the use of computer-based information and communication systems to connect people to people and to connect people to information; that is, the use of email and the Internet.

Uganisha assistance

To improve connectivity of project recipients, Uganisha provides: technical advice; subsidies for Internet/email access and training; Help Desks; and Publications. It also investigates new technologies. So far, the Uganisha project has provided assistance to about 50 IDRC projects (Appendix 2). Most of the assistance has been in the form of subsidies for Internet or email access and technical advice. In the near future, many more projects will be assisted as the training program and Help Desks begin.

Subsidies for Internet/email access have been provided to cover costs of subscriptions to Internet Service Providers; local telephone costs; installation of telephone lines; modems, computer and LANs (initial purchase or upgrades); web site creation; Win a Web Site contest; and training.

The technical advice provided by Uganisha has been on a broad range of topics such as: establishing information systems for networks; the development of a connectivity plans and strategies; selecting computers systems for rural locations; creation of a news group; the development of a project proposal using a mailing list; and establishing a very private mailing list.

A modular training program has been developed by Uganisha to respond to the needs of project recipients. It focuses mainly on the use of email but also includes a module on full Internet use. One of the main features of this training program is that it is easily adaptable to a variety of situations. Special attention has been paid to gender and cultural aspects of training. After pilot testing in June 1998, it will be available to all project recipients.

Help Desks are being established to provide local assistance to IDRC project recipients. Initially, it is expected that they will be in: Benin, Burkina Faso, Ghana, Kenya, Mali, Malawi, Senegal, Tanzania, Uganda, and Zimbabwe. If these are successful and if there is a demand, Help Desks will be established in other countries in Africa, Asia, and Latin America and the Caribbean.

It was found early in the project that Program Officers were interested in being able to take advantage of collaborative Internet technologies but were unaware of what options were available to them. In response to this, several publications were planned. The first publication to be produced was "From Workplace To Workspace: Using Email Lists to Work Together" by Maureen James & Liz Rykert (http://www.idrc.ca/books/848/index_e.html). This handbook explains how to effectively use mailing lists. Another publication, a survey of collaborative Internet technologies, is currently being prepared (<http://intra1.idrc.ca/unganisha/group.htm>). As well, Uganisha has produced this report on the current status of IDRC connectivity.

New technologies that Uganisha has investigated, or is in the process of investigating, include: search engines; hand-held computers; roaming email service; web-to-email gateway; intranet systems; web-based, interactive databases; and Extensible Mark-up Language.

Sources of information

All Program Officers were asked to provide a list of their projects' web sites (about 30% responded). All Research Officers and IDRC web site managers were contacted and most were interviewed. All Uganisha staff provided input. The following documentation was consulted: RADIUS, the Inter-Agency Development Research Information System (IDRIS), the PI prospectuses, Uganisha's ACT (project management) database, Uganisha trip reports, and Uganisha contracts with IDRC researchers.

The web sites of the following Program Initiatives, Secretariats and Corporate Services Branch were consulted, if they exist. Links to most of the web sites can be found on IDRC's Research Programs page (http://www.idrc.ca/research/index_e.html), the Resources page (http://www.idrc.ca/resources/index_e.html) or the Contacts page (<http://www.idrc.ca/institution/eaddress.html>). All known project web sites were consulted (<http://www.idrc.ca/library/world/idrcproj.html>).

Program Initiatives (PIs):

- Acacia: Communities and the Information Society in Africa
- Assessment of Social Policy Reforms (ASPR)
- Cities Feeding People (CFP)
- Community-based Natural Resource Management (CBNRM)
- Economy and Environment Program for SE Asia (EEPSEA)
- Ecosystem Approaches to Human Health (EcoHealth)
- Learning Systems (Africa) (LCA)
- Micro Impacts of Macroeconomic and Adjustment Policies (MIMAP)
- Minga: Alternatives Approaches to Natural Resource Management in Latin America and the Caribbean
- Mining Policy Research Initiative (MPRI)
- Micronutrient Initiative (MI)
- Pan Networking (PAN) and the Uganisha project
- Peacebuilding and Reconstruction (PBR)

- People, Land, and Water (PLAW)
- Small, Medium, and Micro-Enterprises, Innovation, and Technology (SMMEIT)
- Sustainable Use of Biodiversity (SUB)
- Trade, Employment, and Competitiveness (TEC)

Secretariats:

- Africa Technology Policy Secretariat (ATPS)
- Bellanet
- Environment Management Secretariat
- Essential Health Interventions Project (EHIP)
- Foodlinks
- International Model Forest Network Secretariat (IMFNS)
- International Network for Bamboo and Rattan (INBAR)
- Office for Central & Eastern Europe Initiatives
- Strategy for International Fisheries Research (SIFR)
- Sustainable Economic Development in Vietnam (VEEM)
- Trade & Industry Policy Secretariat

Corporate Services Branch (CSB):

- Evaluation Unit
- Partnership and Business Development Office (PBDO)
- Public Affairs
- Research Information Management Services (RIMS): Publications and Library
- Special Initiatives Program (SIP)

Resources Branch (RB):

- Management Information Services (MIS)
- Human Resources (HR)

Regional Offices (ROs)

- Asia Regional Office (ASRO)
- South Asia Regional Office (SARO)
- Latin America and the Caribbean Regional Office (LACRO)
- Eastern and Southern Africa Regional Office (EARO)
- Middle East and North Africa Regional Office (MERO)
- Southern Africa Regional Office (ROSA)
- West and Central Africa Regional Office (WARO)

The Internet at IDRC--issues and future considerations

Background

Almost from the beginning, IDRC has had a decentralized approach to managing its content on the Internet. Because of this decentralized approach, the IDRC web presence consists of a collection of many web sites. Web sites have been created for most of the Program Initiatives, the Secretariats, the units of the Corporate Services Branch and the Regional Offices. Recently, there has been a further shift in decentralization of content as many IDRC projects have created their own web sites.

This review covers most of the IDRC web sites and includes, if possible, site plans for the near future. The technical and managerial needs assessments have been derived from these plans.

Each web site is created and maintained by a web site manager. For PIs and Secretariats, the web site manager is most often the Research Officer.

Communication and connectivity strategies:

The Internet is one of the information and communication tools available to the Centre. As such, the strategies for its use need to fit with the overall communication strategy of the Centre. An IDRC communication strategy is being developed by Public Affairs (estimated publication date: June). The Publication Unit's report, "IDRC's Public Website: A Communication and Development Strategy", will be reviewed to ensure that it fits in with IDRC's communication strategy.

One of the PIs that has already developed a connectivity strategy is ASPR. Their work is now guided by this strategy. The aim of the strategy is to strengthen networking and collaboration within and among its partners. The PI has identified networks of institutions as their priority for connectivity. An example of this is the Social Development Forum for the Americas, FORO, which is an umbrella site for ASPR activities in Latin America. One of the goals of FORO is to encourage the ASPR-supported networks to develop their own sites and communication systems.

Until all Regional Offices and IDRC project recipients are able to host their own web sites, some of them are creating sites hosted by other organizations. For example, the WARO and LACRO sites and ASPR's FORO project site are hosted on the IDRC head office server but managed by staff from those Regional Offices, the PAN hosts several project web sites, Uganisha hosts sites for the HUMUS network and for Cantho University, and CFP hosts a site for the AGUILA project.

Recommendation: that the current Internet strategy coordinate with the overall communication strategy for the Centre.

Recommendation: that the local hosting of web sites should be encouraged and that if hosting on

remote server is a necessity, sites should be created and managed by local staff if possible.

Decentralization and IDRC Project web sites:

One of IDRC's roles is as a knowledge broker for information generated by the projects it supports. When IDRC's Internet presence began, this information was collected on the IDRC corporate site. As the management of web content was decentralized to the PIs, project information began to accumulate there. Now, many IDRC projects and Regional Offices have their own web sites. This movement of project-generated information from the IDRC web site to project web sites has further decentralized the content creation and is profoundly affecting the IDRC head office web site. SIP, MIMAP and ASPR have been particularly active in promoting local electronic publication by project recipients. Also, the Programs Branch created the Unganisha project to assist selected IDRC project recipients to better their electronic communication systems.

A consequence of this shift to decentralization is that project information can appear in several different places in slightly different forms. For example, it can be found in the following places: IDRIS/RADIUS databases, BIBLIO Library catalogue, PI and Secretariat sites, RO sites, RIMS' Digital Library, IDRC Books, Nayudamma site, IDRC Reports, PI and RO sites produced by Publications, Media site, LEADS, IDRC videos, Partnership and Business Development Office site, To the World inventory of project web sites, and soon the Evaluation Unit site. There is no method of easily accessing information about a particular project from each of these sites and, in most cases, IDRC project numbers are not included.

The focus in the future needs to shift towards system interoperability and coordinated content development and formatting. Some of the open standards for information management and retrieval that promise improved integration and access are the Extensible Mark-Up Language (XML), metadata (Dublin Core and Government Information Locator System (GILS)) and for databases, ISO 23950 (formerly Z39.50). The use of these types of systems should be investigated, developed and coordinated so that retrieval is enhanced. Considerations in the choosing of these systems should include the ease of use by web site managers and project recipients and the interoperability with current systems.

To be able to access the information found on these distributed sites, a multi-site search is needed. There are plans to evaluate various multi-site search engines over the next few months.

Recommendation: that coordination among the sites be increased.

Recommendation: that the use of open standards for information management and retrieval should be investigated, developed and coordinated.

Recommendation: that as the IDRC Internet presence becomes more distributed, a multi-site search engine be obtained

Standard web site features:

Most Program and Secretariat sites include:

- the Prospectus (for PIs) or similar document; e.g., Annual Reports,
- a list of active projects,
- a list of links to related sites,
- biographies of team members and staff,
- newsletters, and
- a list of publications.

As well, the IDRC web site template includes standard navigation tools and some standard features (see <http://www.idrc.ca/assist/>). All IDRC sites, except for the MINISIS site, are using the template. The Secretariats have each created a unique site. Most web managers are attempting to keep their sites as simple as possible because of the time required to create and maintain sites (technical and content components). Many of the web site managers commented that it would be useful to have standard information in a central place and in a format that is easily accessible from the various Internet or intranet sites; e.g., staff biographies (LDAP), project descriptions from RADIUS and IDRC job advertisements (now in place). Some of these are starting to be addressed by the IDRC intranet team and Publications.

Recommendation: that the management of some types of information should be further centralized.

Roles and responsibilities of web site managers:

During the consultations with web site managers, it was frequently stated that creating and maintaining a web site is very time consuming. This included producing, reworking and formatting content for the web site, soliciting feedback from the other members of the group and translating. Almost all of the web managers would like to be able to easily contract out this work. This could be managed either by a standing offer contract with a web production company or by using in-house staff. If web work is contracted out, the Research Officers need to know enough about web sites to be able to contract someone else to do the work and to be able to do basic web site maintenance. However, if contracting out is not an option and web maintenance is going to be a part of staff responsibilities, then (1) it should be included in the job descriptions and the work plans; (2) staff would need further training in the various aspects of web management; and (3) more than one staff person per site should have the skills necessary to maintain the site.

Many groups are already contracting out some of the web work or having it done by Interns; e.g., ASPR, ROSA, MINISIS, SIP, the Evaluation Unit, the Library and Publications. Some are using RSAs to fund the contracts. Several groups have staff working either full time or most of their time on web work; e.g., RIMS, Publications, Bellanet and MI.

If there is still a need to continue the advice and support that Unganisha currently provides to

IDRC program staff and project recipients (Unganisha is scheduled to end, March 1999), then another group within the centre will need to be identified and given this mandate.

Recommendation: that the roles and responsibilities of staff be clarified; e.g., web site managers, staff managing centralized content, staff managing the corporate site, and staff providing advice and support.

Recommendation: that the contracting out of web work be coordinated.

Policies and guidelines:

The Internet Working Group (IWG) is responsible for the management and coordination of the IDRC web sites. This group has met once in the last 6 months. The mailing list, IWG-CL, has been quite inactive for many months. This is partly because many of the staff on the IWG are also part of the IDRC intranet team and many of the issues overlap. The Management Policy Manual section, "Publishing on the Internet" which defines the IWG, does not accurately reflect the current situation and should be reviewed (roles and responsibilities of staff). A listserv established for IDRC web site managers has been very inactive although the few messages that have been sent to the list have been useful.

It was suggested, during the consultations, that:

- the Programs Branch have two representatives on the IWG. It was noted that participation on the IWG by Programs Branch staff has been beneficial. In particular, the messages exchanged on the IWG-CL mailing list, when it was active, were helpful. However, it was also noted by the current representative that there is no time now to participate;
- the guidelines for mandatory vs optional bilingualism be clarified;
- the role of Publications in formatting documents and creating web sites needs to be clarified;
- the flexibility of the guidelines is not always clear;
- additions to the guidelines could include font specifications; information about transferring graphics from WordPerfect documents to web documents;
- there is an increase in work load when system-wide changes are made; e.g., new template, new server;
- image files from IDRC's digital cameras be systematically collected in the Images database; and
- it is a challenge to keep up-to-date on the web site guidelines.

In many cases, IDRC support is not mentioned on the project web sites. A statement concerning this acknowledgement could be added to the Memorandum of Grant Conditions (MGC). Also, there could be a line item in the standard project contract to specify that project recipients post project related material for a specified length of time on their web site, if they have one. In the MGC, it is stated that project recipients are requested to provide "a machine-readable copy of the report, on diskette, specifying the hardware and software(s) used". The enforcement of this condition should be investigated. Procedures should be established for the systematic collection of the electronic version of required documents by RIMS.

Recommendation: that policies and guidelines for web site management be reviewed and updated.

Recommendation: that all web sites produced by IDRC projects acknowledge IDRC support; that projects recipients be encouraged to publish research results on their own web site; and that there be a mechanism for coordinating information on project web sites

Analysis of web site use:

Although comprehensive statistics used to be produced, they are no longer available for viewing from the IWG web site. The main report of the new software, WebTrends, is only a selection of statistics. Apparently, specific WebTrends reports can be requested from MIS. Periodically, there should be a comprehensive review of web site statistics to determine the usage of sites.

Recommendation: that, periodically, there be a comprehensive review of web site statistics.

Training needs:

As changes in the structure of the IDRC web site occur and as technology and systems change, more staff training will be required; e.g., information technology (setting up servers and search systems), information management (metadata systems and database capabilities) and content providers (how to use the new systems and templates).

The consultations with web site managers yielded the following comments:

- In many cases, there is only one staff member with the skills to develop and maintain the web site. At least one more staff person per site should be trained to assist with this.
- If web management is going to continue to be part of their responsibilities, then further training would be required. Other web site managers require no further training at this time as they are comfortable using Netscape Composer to create and maintain their files in the current situation.
- The training provided so far has been too general and sessions were too slow.
- Some managers have found that it is a challenge keeping up-to-date on basic Internet technology; e.g., versions of HTML.
- There is a need for training in more effectively searching the Internet.
- One web site manager is interested in learning more about behaviour patterns related to email and Internet use; e.g., how people really act, what they really use and how much time it takes?
- Interns and students have been used to create or update web sites. They need to be oriented to the IDRC web sites guidelines and, in some cases, they need basic Internet training (HTML).

Recommendation: that training requirements be frequently reviewed and appropriate training provided.

Systems:

Management systems for project information and lessons learned:

IDRC project data resides in RADIUS. The records from RADIUS are converted into IDRIS, the Inter-Agency Development Research Information System in MINISIS version G software. There is telnet access to this system. To allow for web-based access, the records are transferred to MINISIS version 8. RIMS manages IDRIS. A web-based interface for RADIUS is being developed by MIS and the IDRC intranet team which will probably replace the IDRIS system. One of the limitations of the IDRIS system is that it is not possible to produce a live web report of a subset of the database. Consequently, many of the PIs have been listing project descriptions on their web sites. As a result, updates to IDRIS records are not reflected on the project sites. Also, the information that is presented about projects differs among the PI sites. Many of the PI web site managers expressed interest in (1) being able to access a subset of the IDRIS/RADIUS records or (2) being able to provide a list of projects with links to those records in IDRIS. In some cases, they would like to be able to have a custom view of the records.

As well as plans to develop a web-based interface for RADIUS, there are plans to move the RADIUS records from Paradox software to Oracle next year.

The evaluations of IDRC projects and activities are systematically collected in the Evaluation Information System (EVIS). EVIS is being transferred into a Paradox database. There are no plans to make it web accessible. The Evaluation Reports are currently being tested in the Reports depot.

Several other systems have been developed to manage project information:

- Acacia's is supporting the Evaluation and Learning Systems Approach (ELSA) which is a system that will manage lessons-learned and make them available to Acacia staff and stakeholders and to communities.
- Acacia and Bellanet have created the AI-AIMS (Africa ICT - Activity Information Management System) system for the local management of information about active and proposed ICT projects. This system allows for direct donor input and includes projects being considered for funding by several donor agencies and executing agencies. The data resides in Quattro Pro. There is a web-based input form for program staff written in Cold Fusion. The staff indicate on the form whether or not the information for a particular project will be displayed on the internal site or on both the internal and external sites.

As well, several systems are in the process of being developed:

- CBNRM has prepared a draft of a system that allows users to click on maps to find projects in particular countries.
- For Acacia, the management of information and communication systems will be shifting to the three regional offices. Based on common electronic filing procedures and web-based pipeline management, each office will be responsible for reporting out their information to the whole program.
- Bellanet is developing a lessons learned archiving system.
- Foodlinks has developed a draft of a project tracking system. It includes an Electronic Document Management System (EDMS) Document Store for Project documents, Cold Fusion Data Entry screens, Cold Fusion Evaluation screens, Cold Fusion Reports, and Crystal Reports 5.0 Reports.

- Bellanet and Unganisha are beginning to develop an XML (Extensible Mark-Up Language) system for Development (Development Mark-Up Language). The goal of this system is to facilitate the exchange of project information among donors agencies.

Many PIs and Secretariats have expressed interest in having a project tracking system and, in particular, a system that would capture lessons learned. The Prospectuses of CBNRM, Minga, PBR, SUB and TEC mention that these PIs plan to enhance the electronic distribution of this type of information. Also, IMFNS is investigating the possibility of adding a database or distributed search system for capturing Lessons Learned from model forests located around the world (a pre-feasibility study has been completed). The development and deployment of this type of system should be coordinated as it is a major undertaking.

Another aspect of some project recipients having full Internet access is that they are able to interact with web-based databases. Systems are being investigated that would allow project recipients to input information about their projects into IDRC systems.

Recommendation: that subsets of IDRIS/RADIUS records be accessible so that the need to create text lists of projects on each PI web site be eliminated.

Bibliographic databases and other databases (non-project):

Currently, the only bibliographic database is BIBLIO, the Library catalogue. Like IDRIS, this MINISIS-based system is accessible via telnet or the web. The Library is investigating improving the capabilities of the web-based version of BIBLIO.

Several web-based bibliographic databases are being planned by PIs and Secretariats:

- ASPR plans to include a bibliographic database with a web interface.
- CFP is planning to add a 30 page annotated bibliography soon. They do not want to use bibliographic database software because of the added time requirements to establish it. Instead they would like to rely on a standard search engine system.
- EcoHealth has 2 bibliographic databases that need web interfaces. One of them is in Microsoft Access.
- MI would like a web-based interface for their Resource Centre catalogue which is currently in Procite.
- Publications has plans to create a database of IDRC Books in Microsoft Access. There will be strong links with the book catalogues of the International Institute of Sustainable Development and the North South Institute.

The Library has produced guidelines for the creation and maintenance of bibliographic databases and continues to provide advice in this area.

Many other databases are being developed or planned:

- The Library is planning to have a web-based interface for the IMAGES database which is now in Microsoft Access. This is a database of digitized slides from IDRC projects.
- Publications has plans to create a mailing list of approximately 10,000 names to be maintained

in a Microsoft Access database. This is a list of subscribers to the IDRC Books notification list. A Cold Fusion web interface is being developed so that names can be added by the public. It will be searchable on the intranet. In conjunction with the Association of Universities and Colleges of Canada, there are plans to add a registry for Canadians by form. Publications is assisting in the development of a corporate-wide address book that would be a centralized Rolodex but with individual sections.

- Publications has plans to create a directory of staff email addresses in an Microsoft Access database.
- The IDRC intranet team is creating a Calendar with both internal (intranet) and external (Internet) views; i.e, public events and IDRC internal events.
- INBAR's goals include connecting all institutes (11-12) into a global network and creating INBARIS, the INBAR Information System.
- MI provides access to data from several technical databases. The data resides in FoxPro databases and is made available on the web site in text format.

Over the next few years, it is predicted that there will be a blurring between document management and database management systems. This will happen as documents begin to include tags that can be accessed by search engines; e.g., XML and metadata.

Management of large documents:

Most of the large documents on the IDRC web are provided by IDRC Books and the Library (RIMS' Digital Library). Most PI site managers have begun to add full text documents to their sites and project recipients are beginning to add them (e.g., final reports, conference proceedings). Currently, there are guidelines for the publication on the Internet of these types of documents. However, the guidelines have not been consistently followed, these documents cannot be accessed as a group and they do not appear to have been systematically collected in the IDRC Archives. Some of these issues may be solved (1) by the implementation of the Electronic Document Management System (EDMS), (2) during the development of the IDRC intranet, (3) by the addition of the ability to include hyperlinks in the Library catalogue, BIBLIO, and (4) during the development and implementation of XML and metadata systems.

The Library's Digital Library consists mainly of the full text of project Final Reports. Many of these documents were digitized during a pilot project carried out over the last few years. There are plans to continue the digitization project this year.

EDMS, which is scheduled to begin this Fall, will be able to capture email with attachments; it includes a correspondence tracking module; non-IDRC staff (project recipients) and Regional Offices will be given access through the firewall; workspaces will be defined for specified groups (within the workspace, can track who changes what, search, and be informed of any new documents added to the workspace); and there will be a web-based interface. The first phase of the intranet is currently being developed.

Examples of sites with extensive full text documents collections, besides the Library and Publications, are the Acacia site which includes many documents produced by Acacia

consultants and the CFP site which includes a Report Series (19 reports with plans to add 8 more). Several PIs and Secretariats are planning to add more full text documents to their sites.

Most of the large documents are formatted in HTML. Some documents have been made available in PDF (portable document format) while others are in HTML and PDF; for example, the Annual Report. Centre Training and Awards are in the process of converting their application forms from PDF to HTML as a result of feedback from applicants. The occasional document is available in WordPerfect format only.

Recommendation: that all full text documents and images be systematically collected by the IDRC Archives.

Use of mailing lists and other discussion tools:

The use of mailing lists for IDRC business is widespread; e.g., PI mailing lists. From the consultations with web site managers, it was found that the most successful mailing lists were those that were an integral part of the business process or those that were established for a specific purpose. Some of the business processes include mandatory posting of official documents and the use of the list as an archive for the group; e.g., Acacia, PAN.

At IDRC, the mailing list software was updated from ListProc to Lyris. The IDRC intranet team and Uganisha are experimenting with the mailing list software, WebBoard, which further combines email and web attributes.

Mailing lists for projects are also becoming quite prevalent. To assist with the successful use of mailing lists, Uganisha and Bellanet recently published "From Workplace To Workspace: Using Email Lists to Work Together" by Maureen James & Liz Rykert (http://www.idrc.ca/books/848/index_e.html).

In the case of project mailing lists, they have also been used quite successfully for business purposes. Mailing lists have been established for pre-conference discussion and the development of project proposals; e.g., PLAW's preconference mailing list for the conference, "Global Consultation on Balancing Livestock, Environment, and Human Needs" and CBNRM's mailing list that was used to assist in the development of HUMUS project proposal. Some of the crucial issues for project mailing lists are security, access and computer use. Because the content of the messages can be highly sensitive, the participants must be assured that the system is private before they will agree to participate. For example, SUB's Crucible Project is creating a very private mailing list for discussion of intellectual property rights with guidelines for use, a facilitator and a temporary web site for document sharing prior to a conference. For some PIs, many of the projects recipients may not have access to email, may have access to communal email only, communication costs are high and connections can be problematic. Related to computer literacy and computer use, an LCA project established a mailing list of key actors in education in Africa. Instead of contributing directly, some of the participants hired secretaries and research assistants to assist with their participation.

Besides mailing lists, other communications systems are being investigated; e.g., video-conferencing and chat systems. The Regional Offices and Uganisha have recently tested web-based video-conferencing system. The Preliminary Results of Internet Video Testing are available at <http://unganisha.idrc.ca/ivideo/>. Currently, video and audio conferencing over the Internet is not recommended for general use. Chat systems like ICQ are being used more often. For example, because conference calls to Asia are expensive, PAN has been experimenting with Parachat, a chat software.

Recommendation: that the purpose of mailing lists be clearly defined.

Links:

The main site for collecting links to related sites is the Library's To the World site. The Library has been investigating systems to better manage the links. All IDRC staff are encouraged to contribute to this site. SUB and SIFR assisted in the preparation of the "Biodiversity and Indigenous knowledge" and "Fisheries, aquaculture and oceans" sections of the To the World site respectively. Currently, there are no connections between the To the World site and all the other lists of sites.

Many sites maintain their own list of links:

- PAN-Singapore maintains a list of links to Asian R&D Information Resources in frames format.
- Foodlinks started creating a system for managing links to related web site that includes annotations and subject headings.
- ASPR plans to further expand their links.
- EcoHealth and PBR are preparing lists of links.

The PAN-supported project, "Bookmarks: Web-based Development Information Reference System" consists of a searchable collection of more than 600,000 web sites managed by OpenText search engine.

Multimedia:

The use of multimedia has been discouraged on the IDRC web sites because of the large files sizes required (it is recommended that each page be less than 30K, see http://www.idrc.ca/assist/webdesign_guidelines_e.html). PAN-Singapore provides some multimedia content; e.g., video, audio.

Recommendation: that, currently, multimedia is not recommended for general use.

Interactive systems:

Many web site managers are receiving messages from web visitors as a result of the email address listed on each page (usually at the bottom of the web page).

Publications Unit has transformed the weekly "IDRC Reports" into a more dynamic system, "Reports: Science from the Developing World". The main goal of the new format is to encourage networking among researchers from developing countries. A form is being developed for the public, IDRC staff and project recipients to input ideas to Reports. Reports will not just consist of new articles, it will also contain abstracts of articles published elsewhere and a pointer to the article if it exists on the Internet.

"EchoNet", an electronic version of "Echogramme" is being created for the IDRC intranet by Publications. There will be an input form (like Reports). It is managed by the Resources Branch.

Site management software:

There are several site management systems in use:

- The IDRC web sites are managed by Netscape Enterprise software.
- Bellanet has its own server and is starting to use Cold Fusion for web site management.
- Unganisha maintains a LINUX server.

Intranets:

There are several IDRC intranet sites.

The main IDRC intranet is currently being developed by the IDRC intranet team and will include: EchoNet; staff travel plans; trip reports; a calendar; and web access to RADIUS.

The PAN-Ottawa intranet includes meeting notes, contact information, travel plans, work plans and extra project material. There is also a private site for PAN- Singapore.

For Acacia, the emphasis has been on quick publication rather than on maintenance. Some of the files are kept on the Y:drive and mirrored on a central server. An FTP updating system, FileDog, is being used to automatically mirror files on the Y:drive and on a central server. FileDog is available at several African Regional Offices. Because the intranet site is behind the firewall, MIS has modified the security so that each Regional Office can access the files. Some Regional Offices have had more success than others in accessing the files. Generally, the intranet site is being used instead of the W:drive.

CBNRM has interlinked their Internet and intranet sites. The intranet site allows users to input, modify or delete information that can be viewed on both sites; e.g., news and project contact information. This process is automated using Cold Fusion. This use of forms on the private sites eliminates the need of staff to learn HTML or to upload files.

Minga has developed a private web site, which is used by Minga staff to share information; e.g., internal documents, pipeline ideas, travel schedules, etc.

Recommendation: that there be coordination of the many systems that exist, or are being

developed, to manage: (1) project information, (2) bibliographic databases, (3) documents, (4) mailing lists, (5) lists of related sites, (6) interactive systems, and (7) intranet sites.

IDRC project recipients

IDRC project recipients span the full range of information and communication technology (ICT) use. An inventory of the use by project recipients of ICTs can be found in the Appendix. Selected IDRC project ICT activities are featured in the "The Internet at IDRC" section of this report. A list of approximately 125 IDRC project web sites can be found at:
<http://www.idrc.ca/library/world/idrcproj.html>

There are 3 main components of project connectivity that will be addressed here: what can be done with various levels of connectivity; what issues are involved in establishing connectivity; and what can be included on a project web site.

What is possible with email only?

As well as being able to exchange email, researchers can participate in mailing lists. Personal email does not always exist as there may be one email account for a group or institute. The use of web-to-email gateways permits access to most Internet files and systems; e.g., text documents and images but not a combination of text and images together. However, the gateways can be cumbersome to use for complex retrieval; e.g., database searching.

What is possible with a slow/intermittent Internet connection?

With a slow Internet connection, researchers can exchange medium length documents with a few small graphics. Files can be shared using email attachments, posted to the web or made available via FTP. Databases can be searched via telnet or via a web-based interfaces. Researchers can input data into web-enabled databases and spreadsheets.

What is possible with a fast, reliable Internet connection?

With a fast Internet connection, long, complex documents and multimedia files can be exchanged. Researchers can participate in audio and video conferencing and in Internet chat systems.

Establishing connectivity--a checklist of questions:

The initial questions that should be addressed when a project recipient is establishing an electronic communication system are:

- Is there a current communication plan and, if so, how does the electronic communication systems relate to this plan?
- What kind of information needs to be distributed, accessed and shared; e.g., email messages, simple documents, or large documents and multimedia files, databases or spreadsheets?
- Which languages must or should be used?
- Is a new electronic communication system going to replace or enhance present communication systems; e.g., (1) replace face-to-face meetings with audio or video meetings; (2) enhance physical conferences with an electronic conferences before, during or after the physical conference?
- Does the technology level of group members need to be updated; i.e., do they require training?

- Is email/Internet required for one researcher, a small group or the entire institute?
- Are dedicated telephone lines required?
- What kind of email system is possible in that situation; e.g., continuous connection (messages are sent and received continuously) or store and forward (messages are sent and received periodically)?
- What kind of link can be established with a local Internet Service Provider (ISP)?
- What kind of connection is possible; e.g., single dial-up connection or a LAN connection?
- Are computers and modems accessible to the researchers and, if so, are they adequate (they should have at least a IBM-compatible 486 or equivalent for slow Internet access)?
- Is technical support available for effective installation, trouble-shooting and maintenance?
- How much funding is available?

See also the Acacia publication, "Use of Information and Communication Technologies in IDRC Projects: Lessons Learned", by Michael Graham, <http://www.idrc.ca/acacia/outputs/op-eval.htm>; especially, the questionnaire, <http://www.idrc.ca/acacia/outputs/op-eval3.htm#Appendix 3>.

IDRC project web sites--a checklist of contents:

Many projects now have a web site or are in the process of developing a web site. The project web site can include:

- project objectives and project description
- contact information for key researchers; e.g., name, address, telephone, fax, email, short biography, links to publications
- full text or abstracts of all documents, e.g., research papers, newsletters, journals, conference proceedings, and the interim and final project reports
- listing of events, conferences, workshops etc.
- archives of electronic discussions with appropriate security if privacy is required
- databases that can be searched from the web (i.e., web-based interface)
- images and multimedia, if the circumstances allow (i.e., users have appropriate bandwidth),
- links to all web sites related to the project/network
- search engine for the web site and, if the project involves a network, a - search engine for all web sites of the network
- information should be formatted so that it is accessible by text only browsers and web-to-email gateways
- links between project web sites and the IDRC web site need to be created and maintained

Appendix 1: Inventory of IDRC connectivity activities

Programs Branch

Acacia

Web site management: Frank Tulus (interviewed Shady Kanfi)

Web site, connectivity and comments:

- The official web site includes all basic information including the prospectus.
- Acacia participates in the AI-AIMS database of ICT development projects. This system allows for direct donor input and includes projects being considered for funding. The data is resides in Quattro Pro. There is a web-based input form for program staff. The staff indicate on the form whether or not the information for a particular project will be displayed on the internal site or on the internal and the external site. The web-Quattro Pro interface is written in Cold Fusion.
- An automated FTP updating system, FileDog, is being used to automatically mirror files on the Y:drive and on a central server. FileDog is available at several African Regional Offices.
- There is an internal web site at <http://intra1.idrc.ca/programs/Acacia/index.html>. Some of the files are kept on the Y:drive and mirrored on a central server. The internal site is used as a private place to put documents quickly. The emphasis has been on quick publication rather than on maintenance. Because the intra1 site is behind the firewall, MIS has modified the security so that each Regional Office can access the files. Some Regional Offices have had more success than others in accessing the files. Generally, the intra1 site has been used instead of the W:drive.
- The french version of the web site is not as comprehensive as the English site and not as regularly maintained. The french part of the site may be managed by WARO and eventually reside on their server.
- The site includes many full text documents, all of which were produced by Acacia consultants
- Several mailing lists exist: Acacia-L, Acacia-IDRC-L, Acacia-core-CL, Acacia-launch-CL, E-Acacia-cl, W-Acacia-cl and Telecentres-cl. The use of the mailing lists has not been extensive, even for Acacia staff. To encourage use, all PIMs have to be submitted to the list. In this way, the lists are used as an archive of the submission but not of the actual documents.
- For official PI web pages, there has been a "keep it simple" philosophy; ie., only email and web pages. All other systems have been experimental.
- The evaluation and learning systems approach (ELSA) is a project to track lessons learned. Initially, it will focus on ICT projects, specifically telecentre projects. In the initial phase, there will be 2 component: 1 for telecentre managers and 1 for Acacia program staff. A unique interface will be developed for each group by that group.
- The Acacia team will have a monthly conference call.
- By year end, Acacia will have established small offices in both Uganda and Mozambique to facilitate the national strategies in those countries.
- The role of information and communication management will be shifting to the three regional offices. Based on common electronic filing procedures and web-based pipeline management, each office will be responsible for reporting their information to the whole program.

Project web sites and connectivity activities:

- All Acacia projects include connectivity activities.
- Connectivity, Southern Africa, IDRC Project: 002858. This project is a precursor to the Acacia project and the web site includes the Final Report. <http://www.idrc.org.za/connectsa/> and http://www.idrc.org.za/connectsa/res_results/twocells.htm
- Info & Comm Theme? (May not be Acacia): Global Knowledge '97 conference, IDRC Project: 003476. This project included support to the Association for Progressive Communications (APC), Web Networks of Toronto who published a background document and established several public mailing lists. Some of the mailing lists have been more active than others: the lessons learned list had only 2 serious submissions, the GKD list is still running and the gender list was very active. <http://community.web.net/gk97/>
- Introduction of ICTs in Secondary Schools (Mozambique), IDRC Project: 004101. From IDIRIS: "...Computers and communication facilities will be installed in five secondary schools, three teacher training colleges and two technical institutes in Mozambique. One computer will be installed in the library of each school, to encourage information sharing and communication between students and teachers. Another 10 will be installed in computer laboratories, to support both computer literacy training and the integration of computing into other subjects..."
- Information and Communications Policy - Mozambique, IDRC Project: 003796. From IDIRIS: "...The expected output will be a state policy on information and communication technologies based on extensive consultation between the Government of Mozambique, the telecommunications sector and the public at large."
- Multipurpose Community Telecentre Pilot Project (Uganda), IDRC Project: 003225. From IDIRIS: "...The MCT will be equipped with telephone, fax, Internet e-mail and World Wide Web access, along with video, audio and documentation production facilities..."
- South African Telecentre Development Project, IDRC Project: 003795. From IDIRIS: "...Adopting these telecentres will help test new technologies and applications, innovative policies and tariff structures, and new approaches to organizing telematics services..."
- Intégration de la dimension genre dans la stratégie ACACIA - Sénégal, IDRC Project: 065202. From IDIRIS: "...étant donné l'accent mis par le Programme ACACIA sur les femmes et les jeunes pour la promotion de leur accès aux technologies de l'information et de la communication, il s'avère nécessaire de mieux prendre en compte les relations de genre dans la Stratégie qui a été définie pour le Sénégal, un des pays choisis pour tester les approches intégrées dans le cadre du programme ACACIA..."
- Role of ICTs in the Implementation of the Decentralization Policy in Senegal, IDRC Project: 065199. From IDIRIS: "...The purpose of this project is to explore possibilities offered by ICTs to operationalize further the decentralization so that locally elected people may assume their responsibilities effectively..."
- Msunduzi Community Network (South Africa), IDRC Project: 003981. From IDIRIS: "...This project aims to improve community-level decision-making by improving communication and information management on environment and development issues... Eight hubs will be set up based in a variety of community organizations spread throughout the region, with a local environmental group at the centre. Representatives from each hub will be given the required

training. It is expected that this will result in a model of how to involve semi-literate communities in decision-making processes through the use of information and communication technologies (ICTs)."

- Pilot Telecentres Monitoring, Impact Assessment and Learning System, South Africa, IDRC Project: 003797. From IDRIS: "The Universal Service Agency (USA)... is embarking upon an ambitious program to pilot test approximately 80 telecentres, the first of several hundred envisaged over the next two to three years nationwide..."

- Mozambique Acacia Advisory Committee Secretariat, IDRC Project: 003752. From IDRIS: "...This project will establish a Secretariat in the Office of the Vice Rector to support the Mozambique Acacia Advisory Committee (MAAC) and facilitate the implementation of the Acacia National Strategy in the country. The Secretariat will have three broad areas of responsibility: stimulating public awareness of ICTs and development issues; assisting in the identification of research and project development needs; and informing and servicing the MAAC..."

- Empowering People's Organisations with Internet Access, IDRC Project: 003729. From IDRIS: "...In this project, AIDC [Alternative Information Development Centre] will help build the capacity of primary role players in civil society such as community-based organizations (CBOs), non-governmental organizations (NGOs), local trade unions, civic organisations, etc., to take advantage of ITCs. The project will focus primarily on organizations associated with black women and youth. A comprehensive range of services is envisaged to enable them to use ICTs such as the Internet as a tool to enhance their community-based work."

- Establishing Two Pilot Telecentres in Mozambique: Feasibility Study, IDRC Project: 003728. From IDRIS: "...It is expected that the methodology will contribute to knowledge on how best to introduce telecentres and find more general application in and beyond Mozambique."

- Experimentation of information technologies in Western African centres for reading and cultural animation, IDRC Project: 003702. From IDRIS: "...Deliverables are case studies dealing with experimentation of information technologies at the community level. These studies will be produced and disseminated on the Internet through the IDRC and the Agence de la francophonie Web sites, and also in print to potential users and donors..."

- ICTs for Tourism-driven Local Economic Development Workshop, IDRC Project: 004044. From IDRIS: "The Council for Scientific and Industrial Research (CSIR), South Africa, is working with IDRC on a project proposal to develop specific information and communication technologies (ICTs) to support tourism industry development... The workshop is expected to focus on the following areas: community access to connectivity (e-mail and full internet access) and related training and technical assistance; ICT support for business service providers and related training and technical assistance; development of tourist industry software; and electronic marketing, promotion and booking..."

- Consultation on Regional School Networking, IDRC Project: 003993. From IDRIS: "Two delegates from each of six countries have been invited to attend a school networking conference in Cape Town. The countries are Angola, Botswana, Lesotho, Mozambique, Swaziland and Zambia... A meeting will be held on 25 September 1997 to allow the delegates to explore the possibility of working towards a school network in the region..."

- Women's Net Information Strategy Team Workshop, IDRC Project: 003944. From IDRIS: "...Some of the topics to be tackled during the workshop will be the framework for the Women's Net site; information management systems for the site; ways of assuring long-term sustainability

of the site; capacity-building in website development; and sharing the experience with other African countries.”

- Broadcasting Policy Process, IDRC Project: 003800. From IDRIS: “...The government is embarking on a reform of broadcasting policy that includes a review of the linkages between broadcasting and ICT policy; synergies between broadcasting and the Internet; the roles of public, private and community broadcasters; the convergence of broadcasting, telecommunications and information technologies; and the role of broadcasting in delivering universal access to the information society...”

- SA Government Internet Policy, IDRC Project: 003802. From IDRIS: “The broad objective of this activity is to advise to the Department of Communications of the Government of South Africa on a strategy to develop an Internet policy...”

- South Africa: Cybercity, IDRC Project: 003801. From IDRIS: “The broad objective of this activity is to help the Department of Communications of the Government of South Africa establish the feasibility of building a cybercity in South Africa...”

Acacia Prospectus excerpts:

“Acacia has identified four key components (policies, infrastructure, technologies, and applications) which will govern the development of its programming and the selection of individual projects. Acacia will thus:

(1) foster ICT and telecommunication policies which are hospitable to ICT access in rural and small-town communities (e.g. changes in pricing policies, regulatory frameworks, the delivery of public information, and universal service/universal access);

(2) encourage and selectively support the development of human capacity and innovative technical infrastructure that extends communication networks to rural and small town communities (e.g. radio, satellite, cellular telephone-computer linkages);

(3) broker and support research and development (R&D) on tools and technologies which facilitate ICT use by the marginalised (e.g. graphic, touch-screen, and multilingual interfaces); and,

(4) promote and support applications and services which respond to specific community needs (e.g. enhancing the delivery of education, distributing health and agricultural information, and other applications defined by communities themselves)

Acacia will place special emphasis on tackling the multiple barriers to community use of ICTs through integrated strategies at the national level, which are discussed below.”

“New and promising technologies will be assessed based on their potential to facilitate needs-based applications. These technologies are best identified in partnership with the communities themselves and may sometimes include: voice recognition and text-to-speech conversions; innovative technology combinations. eg.: graphic user interfaces, touch screens, and kiosk information delivery stations; emerging concepts of low-cost ‘network computing’ and related technologies; machine-based language translation; wireless connectivity at both the village and global levels; and, Geographic Information Systems (GIS), Global Positioning Systems (GPS), and remote sensing technologies to assess, monitor, and manage natural resources.

Acacia will also look at traditional technologies such as community radio, video production and

distribution, and popular theatre, when these are links in an information and communication chain that introduces new technologies to marginalised populations. For example, this could include enriching the information content of community radio by giving producers access to the Internet, or using videos as the subject of interactive distance dialogues."

Assessment of Social Policy Research (ASPR)

Web site management and coordination of ASPR connectivity activities: Martha Melesse

Web site, connectivity and comments:

- The connectivity work that ASPR does is guided by a connectivity strategy that the PI developed. The aim of the strategy is to strengthen networking and collaboration within and among its partners. The PI has identified networks of institutions as their priority for connectivity.
- The PI conducts needs assessments on a case by case basis and has developed a needs assessment questionnaire aimed at identifying the nature and scope of support sought by researchers to strengthen networking and regional cooperation. The questionnaire was used to assess the needs of the Social Policy Networks in East and West Africa. A generic Unganisha connectivity questionnaire is now used.
- The PI had found that there is a great deal of interest among researchers to explore the use of electronic means to enhance communication within and outside the networks. This includes electronic conferencing, Internet sites, and mailing lists to discuss issues pertaining to social policy research and to share research methodologies. They have also found that the challenges are immense.
- Currently, ASPR is attempting to provide email for researchers in the Social Policy Research and Practice in Eastern and Southern Africa and Réseau de recherche en politiques sociales pour l'Afrique de l'Ouest et du Centre networks, which are key ASPR partners in the region. Once these connections have been established, ASPR aims to facilitate the use of electronic discussion groups amongst researchers within and outside the region. One such activity is the "Pan-African Dialogue on Social Development which is currently underway. This pilot activity involves 45-50 researchers, academics, NGOs and development practitioners in Africa and in Canada who are active in social policy research, practice and advocacy.
- ASPR emphasizes building capacities of its researchers for enhanced communication and networking. Planned activities in this regard include: the testing of the Internet training modules developed by Unganisha with some of its network members; to assisting ASPR partners in developing their own web sites; decentralizing the LACRO/FORO site; and setting up an electronic discussion on decentralization involving researchers in Africa, Latin America and Asia (ASPR-supported projects/networks).
- The PI web site was recently updated to include recent information about the PI's activities including projects, publications, research documents, team profile, prospectus, etc. There are plans to further develop the PI web site in the summer of 1998; e.g., expand the links with project web sites and develop links with other related web pages.

Project web sites and connectivity activities:

- Council on Health Research for Development (COHRED), IDRC Project: 002853. The site includes basic information about COHRED and an executive summary of the interim assessment of Essential National Health Research (ENHR) and COHRED. <http://www.cohred.ch/~cohred/>
- Education, Equity and Economic Competitiveness in the Americas, Ph II, IDRC Project: 003130. The Partnership for Educational Revitalization in the Americas (PREAL) site includes the project description and some full text documents. <http://www.preal.cl/Index-i.htm>
- Regional Research Program on Social Policy Assessment Phase II, IDRC Project: 050140. Social Development Forum for the Americas, FORO, is an umbrella site for ASPR activities in Latin America. The goal is to encourage the ASPR-supported networks to develop their own sites and communication systems. Until they have the capability, the sites are hosted by LACRO. <http://www.idrc.ca/lacro/foro/>
- Monitoring and Evaluation of Poverty Alleviation Program (PERU), IDRC Project: 050256. A site in Peru is being developed and, when completed, will include statistics and databases. <http://www.up.edu.pe/poverty/>
- Youth - Complementary Activities, IDRC Project: 003433. Unganisha assisted with the creation of a new newsgroup on the Internet called sci.sociology.youth.livelihoods and provided email access for several researchers in Zambia.
- Youth - Complementary Activities, IDRC Project: 003433. ASPR has been very active in helping to create a web site for the project, Youth Livelihoods Knowledge Network. It will be launched in late spring. It includes a bibliography of best practices, an annotated bibliography and an annotated links section. <http://www.agora-group.com/youth/>
- Education and Urban Labour Market in Mexico, IDRC Project: 920403. The site includes project descriptions, full text documents and resumés of researchers. <http://www.crim.unam.mx/lib/>
- Regional Research Program on Social Policy Assessment Phase II, IDRC Project: 050140. The site includes lists of projects, institutions and specialists. <http://www.rau.edu.uy/polsored/index.html>
- Implementing Integrated Local Social Policy in Bolivia, IDRC Project: 938762. The site includes members and associated networks, papers, bulletins and links to other sites. <http://www.netline.cl/riadel/>
- Social Policy Research Network for West and Central Africa, Phase II, IDRC Project: 003930. ASPR developed a connectivity plan in conjunction with the network coordinator.
- Decentralization and Social Policies, IDRC Project: 050176. Organized, in collaboration with PAN, an electronic conference on health policy reform and decentralization. http://www.idrc.ca/lacro/foro/rr_dec.html

Unganisha assistance:

Subsidies for Internet/Email Access:

Social Policy Research and Practice in Eastern and Southern Africa, IDRC Project: 000288, Denise Deby. Unganisha is providing email access for several members of the ASPR-supported regional Social Policy program.

Subsidies for Internet/Email Access and Technical Advice:

Youth - Complementary Activities, IDRC Project: 003433, Jamie Schnurr. A new news group on the Internet was created called sci.sociology.youth.livelihoods with assistance from Uganisha. Uganisha is providing email access for several researchers in Zambia.

Subsidies for Internet/Email Access:

RPS-AOC: Réseau de recherche en politiques sociales pour l'Afrique de l'Ouest et du Centre, IDRC Project: 000848, Jean-Michel Labatut. Uganisha is providing email access and full Internet access for several researchers.

Subsidies for Internet/Email Access:

Canadian-Developing Country Program on Social Development Research, IDRC Project: 002874, Martha Melesse. Uganisha is assisting in the establishment of a Pan-African electronic discussion group on "poverty alleviation strategies and their impact/effectiveness", a joint ASPR/Canadian Consortium for International Social Development (CCISD) pilot project.

Cities Feeding People (CFP)

Web site management: Brenda Lee Wilson

Web site, connectivity and comments:

- The focus has been on providing access to PI report series; there are currently 19 reports and 7 reports will be added shortly. Not all documents are full text on the Internet yet. There will always be a need for paper copies. An analysis of report requests showed that they receive about 100 requests/month with 23% coming from developing countries.
- The site is only available in English. The site includes the project results from some of the closed projects. There is no biography section.
- The CFP PI hosts a site for the Urban Agriculture Research Network "AGUILA" which includes a newsletter.
- A volunteer will be working 2 months full time and 4 months part time on formatting the reports and managing the listservs.
- Three mailing lists are moderated by the Research Officer: the URBAGRI-CL list is used by the PI team and is quite active; the AGUILA-CL list has just started; and the SGUA-CL (Support Group on Urban Agriculture) list is quite active and used for advice, contacts, meetings, and sharing lessons learned.
- Instead of the project descriptions now on the site, they would prefer to be able to have custom view of the RADIUS/IDRIS records for this PI.
- They are planning to add a 30 page annotated bibliography soon. They do not want to use bibliographic database software because of the added time requirements to establish it. They would like to use a standard search engine system.

Project web sites and connectivity activities:

- Latin American Urban Agriculture Research Network (AGUILA), IDRC Project 000921. This site is hosted by CFP and includes a full text newsletter and a description of the network.
http://www.idrc.ca/cfp/aguila_e.html

- Cities Feeding People Contacts, IDRC Project: 004057. From IDRIS: "...The list will also be uploaded to the CFP World Wide Web site."
- Resource Centre for Urban Agriculture, Animal Husbandry & Forestry (Global), IDRC Project: 003154. From IDRIS: "It will co-fund, through the SGUA's [Support Group on Urban Agriculture] Global Support Facility based at IDRC, the establishment of a global resource centre at ETC International which, in interaction with regional networks, will produce and disseminate a global electronic UA newsletter (regional hardcopies in five languages); hold electronic conferences on selected issues; build and manage a database on UA materials accessible by the Internet and on diskettes; produce a professional and institutional resource directory, reader in five languages, and three selected annotated bibliographies; and manage a homepage on the World Wide Web on SGUA's Global Support Facility activities..."

Prospectus excerpt:

"Networking and Connectivity

Networking and connectivity are central to the CFP strategy and are being developed at both regional and global levels.

Regional networks

Based on previous IDRC assessments, CFP has been working since 1995 to establish regional networks in this new field, using a strategy that will be adapted during 1997-2000. This networking builds on regional surveys of institutional research capacities in Africa, Latin America, and Asia commissioned by IDRC in 1993. Given the priority to Africa and Latin America, more selective and in-depth institutional assessments for Latin America and West Africa were completed in 1994 (CFP Reports 13 and 14). A Latin American network, AGUILA, was created in 1995 and its first program of activities was parallel funded by IDRC in 1996.

AGUILA

The Latin American Urban Agriculture Research Network (AGUILA), founded at an international seminar (IDRC/ FAO) in 1995, started operating an executive secretariat ETC-La Paz, Bolivia, in late 1996. AGUILA's Secretariat (Aguila@coord.rds.org.bo) edited a book in 1997 on 17 experiences from ten countries, on appropriate hydroponics, organic solid and liquid waste reuse, high-valued crops, and animal husbandry. AGUILA regularly issues an electronic bulletin on Internet. AGUILA members also participate on other networks: ILEIA, FAO, CLADES, FORO, CARE International, ETC, TUAN, REPIDISCA, ENDA, CEDAL-AL. Network Activities include: information and publications; research into inter-institutional cooperation; training and education; institutional capacity strengthening; policy and strategy development; and interchanges with other related networks.

IDRC, CIDA, DGIS, FORD, and FAO funding has supported the operation of the AGUILA network and several research institutions: Centro Panamericano de Ingeniería Sanitaria y Ciencias del Ambiente in Peru..., Tropical Agricultural Research and Higher Education Center/ Centro Agronómico Tropical de Investigación y Enseñanza Superior in Costa Rica ..., Centro

Regional de Acción Ambiental y Organización Social in Bolivia willuse (Peru)...,
CEURR/UCMM (Dominican Republic)..., CEARAH-Periferia (Brazil)..., CARE Haiti...,
FUNAT (Cuba)....

The 1997-98 plan of work includes holding a meeting of subregional coordinators, preparing an all-network meeting in 1998 and developing a more integrated Phase II program of network activities, following project-level support to selected network members.

In West Africa, a number of new South-South collaborative projects are in the process of being finalized. These will eventually (1998-99) be linked with ongoing projects to form a viable sub-regional West African Network. In East Africa, there is interaction among several projects tied into policy formulation processes. South Africa may offer lead capacity for a Southern and Eastern African network, a prospect that will be assessed in 1997-98 for a possible network launch in 1998-99. These sub-regional networks will be linked to form the African Network on UA (1999-2000). CFP will electronically link the Latin American network (AGUILA) in 1997-98, with the African and Canadian networks to follow.

These regional networks will help to implement the CFP Prospectus in specific ways: (a) identify and fund inter-city collaborations in technical advice, training, and research; (b) use network meetings as fora to report on and discuss progress of CFP-funded projects; (c) increase potential parallel funding through expanding memberships; (d) publish regional state-of-the-art reports on urban agriculture; and (e) use member organizations as regional partners for SGUA global initiatives."

Uganisha assistance:

Technical advice:

Workshop on the Contribution of Urban Agriculture to Food Security in West African Cities (June 15-18/1998), IDRC Project: 004080, Ola Smith. Uganisha is assisting in the development of a connectivity plan.

Subsidies for Internet/Email Access:

Latin American Urban Agriculture Research Network (AGUILA), IDRC Project 000921, Luc Mougeot. Uganisha connectivity assistance has been requested for about 20 of the 50 members of the AGUILA network.

Community-Based Natural Resource Management (CBNRM)

Web site management: Claire Thompson, Sam Landon

Web site, connectivity and comments:

- The CBNRM PI hired contractor (Mark Faul) for 2 months to work on their web site.
- They would like to have an internal document repository that is easy to use.

Project web sites and connectivity activities:

- Community-based natural resource management, International Workshop, May 11 to 15, 1998, IDRC Project: ? <http://www.worldbank.org/html/edi/conatrem/first.htm>
- Gender, Environment and Sustainable Livelihoods, IDRC Project: 002177. From IDRIS: "... Small research grants will support local field work and analysis, while workshops, electronic bulletin boards and email exchanges of methodological approaches and substantive results will be supported directly through ENGENDER..."
- People and Resource Dynamics in Mountain Watersheds, Hindu Kush-Himalayan (HKH), IDRC Project: 040340. The International Centre for Integrated Mountain Development, (ICIMOD) site contains a project description. <http://www.south-asia.com/icimod/mnr97.htm>

Prospectus excerpts:

"To extend its networking activities, the PI will assess the current status and needs regarding electronic connectivity infrastructure and skills in the use of communication software. The main objective is to provide e-mail connection for each project in the PI and, when possible, full access to Internet. In parallel with establishing connectivity infrastructure, all projects will collect materials to be presented on the CBNRM web site. In collaboration with other PIs and the Connectivity (Uganisha) Project, we will develop training materials and courses in using the Internet to access resources, share ideas, develop papers, and produce Web pages, for the benefit of both PI team members, recipients and collaborating partners.

Wherever possible, networking will be strengthened by encouraging and supporting electronic communications to: discuss new project ideas;

develop project proposals; maintain contact databases (addresses of all participants in CBNRM research); access information relevant to projects; present information and research results produced by projects;

initiate local and global discussions on subjects relevant to CBNRM;

and exchange information about project progress and financial status.

Special consideration will be given to improving communications links both among PI team members located in Ottawa, Victoria and Singapore, as well as between these members and our grant recipients and partners. The Connectivity (Uganisha) Project will work with the PI in exploring the potential of Internet video conferencing, electronic discussion sites, electronic workshops, structured "virtual" meetings and other techniques to enhance productivity and reduce the need for travel while improving internal and external communications. However, in the end, it is recognized that the benefits to participants of engaging in various electronic networking activities must exceed the costs of their participation in order for the networks to be sustainable"

"The PI team has identified the following priority target groups for dissemination and communication activities over the next three years: project beneficiaries, researchers, funders, policy/decision makers and non-governmental organizations. Through direct contacts and exchange, these groups can more easily identify common concerns and shared lessons. Different project-based and program-based information materials will be produced to reach different audiences. The PI team members will integrate dissemination activities into their work in three ways:

a closer examination, during the project development stage, of the opportunities and potential for networking and dissemination activities to be built into a project from the start.
support for specific activities/events, such as the repackaging and dissemination of research results by extension agents; workshops for policy makers; or seminars for researchers.
development of specific PI communications tools, such as published reports; a social sciences resource kit; a well-developed web site through which researchers can access each other's results."

"Expected Outcomes...

dialogue and communication established and sustained among resource users, communities, researchers, government officials and other stakeholders concerned with resource management issues information sharing and exchange between IDRC recipients, other practitioners in the field, researchers, policy makers, community groups and advocacy organizations."

Unganisha assistance:

Subsidies for Internet/Email Access:

Sustainable Land Use Options for Shifting Cultivation (Nagaland), IDRC Project: 001772, John Graham. Connectivity support, possibly using a wireless solution, for remote Indian research project was requested.

Subsidies for Internet/Email Access:

Community Based Upland Resource Management (Viet Nam), IDRC Project: 938008, John Graham. Unganisha assistance being provided to establish reliable email and training.

Subsidies for Internet/Email Access:

CBRM: Farming Systems (Vietnam), Phase II, IDRC Project: 040247, John Graham. Unganisha assistance is being provided to establish reliable email and training.

Subsidies for Internet/Email Access:

Community-Based Mangrove Management (Cambodia), IDRC Project: 040401, Brian Davy. Unganisha assistance being provided to establish reliable email and training.

Subsidies for Internet/Email Access:

Vietnam's Forest Challenge (Phase II), IDRC Project: 040384, Stephen Tyler. Unganisha assistance is being provided to establish reliable email (through TMA Co.).

Subsidies for Internet/Email Access:

Local Strategies for Water Supply and Conservation Management (India, Nepal), IDRC Project: 001675, David Brookes. Unganisha is assisting with connectivity (through ICIMOD).

Ecosystem Approaches to Human Health (ECOHEALTH)

Web site management: Zsafia Orosz

Web site, connectivity and comments:

- This site consists of very basic information about the PI. It takes approximately 1 day/month to maintain the site.
- More documents are currently being prepared for the site.
- There are plans to add a list of project titles with a link to the IDRIS search page.
- A list of pointers to related sites is being prepared and the PI would like those organizations to point to this site. This list will be coordinated with the To the World site.
- The PI has 2 annotated bibliographies (1 with 14,000 records in Access). How can this be made accessible on Internet or intranet? Can RIMS coordinate this?
- The EcoHealth listserv is very active but the listserv archives are used infrequently.

Project web sites and connectivity activities:

- Environmental Health Impact Assessment in the Amazon, Phase I & II, IDRC projects: 00380 & 50239. The EHIA site includes background, project descriptions, training and courses, conference proceedings and network contacts. <http://www.geocities.com/RainForest/4672/>
- Malaria Interventions for Child Survival (Africa), IDRC Project: 001375. The Path Canada Directory is a list of suppliers of insecticides and mosquito nets for sub-Saharan Africa and is text-based (i.e., it is not in a database). <http://www.synapse.net/~path/direct.html>
- Integrated approaches to safe drinking water (global), IDRC Project: 003329. The "Global Applied Research Network (GARNET) Water Quality Node" site includes a private section for members for discussion and document posting and a list of related sites. <http://www2.idrc.ca/garnet/>
- Mapping malaria risk in Africa (MARA), IDRC Project: 002781. The site includes an executive summary of the project, project background, objectives and justification. <http://www.mara.org.za/>
- L'apprentissage a distance : les technologies de l'information et de la communication au service de l'éducation de base au Senegal, IDRC Project: 065223. From IDRIS: "...La réalisation des objectifs sera conduite au moyen d'un centre de production de matériel didactique et de leur hébergement sur un site WEB relié à deux centres locaux d'apprentissage situés en zones rurale et péri-urbaine..."

Prospectus excerpt:

"The emergence of information and communication technologies (ICTS) into the countries of the South could increase access to knowledge about ecosystem approaches to human health if properly applied. However, ICTs also have the potential to further marginalise already marginal groups. Thus, in the projects it supports, the PI will strive to incorporate communication activities that will release the potential of ICTs to effectively contribute to research into ecosystem approaches to human health. Through technical training and attention to the level of technology appropriate to each project, the PI will promote the flow of communications within the South and between the North and the South. It will do this by building access to research networks *via* email within projects it supports.

Opportunities to collaborate with IDRC programs focussing on ICTs and connectivity are

planned. Examples of existing collaboration are:

- a. with the Uganisha (IDRC's connectivity project), a consortium of universities in the Amazon will be using the Internet to support distance education programs in environmental health impact assessment (EHIA);
- b. In collaboration with the Acacia Initiative, PI team members are investigating how the addition of simple, village-based communication tools can enrich an existing multi-disciplinary approach to community-based primary health care provision.

This last activity will be closely evaluated for its effectiveness and will serve as a pilot for a broad range of technologies that are needed in applying ecosystem approaches to human health (epidemiological surveillance and disease control, health promotion and training, natural resources management, and community-to-community dissemination and replication of results).

The PI will develop web pages that will convey to readers the concepts and examples of applying the ecosystem approaches to improving human health. The web pages will carry highlights of IDRC funded research. In collaboration with other institutions that carry out related work, the PI will assist readers to find the PI's materials through hyperlinks from other sites and to locate non-IDRC material using embedded hyperlinks within the IDRC pages. The PI's research officer will be responsible for this activity."

Uganisha assistance:

Training:

Environmental Health Impact Assessment in the Amazon (Phase II), IDRC Project: 050239, Gilles Forget. Uganisha provided a subsidy to hire a Cuban trainer to provide email and Internet training.

Training:

Integrated approaches to safe drinking water (global), IDRC Project: 003329, Gilles Forget. Uganisha supported the travel of a consultant to Buenos Aires on behalf of the Water Toxicity project.

Technical Advice:

Integrated approaches to safe drinking water (global), IDRC Project: 003329, Gilles Forget. Uganisha is providing advice for a proposed SchoolNet module.

Subsidies for Internet/Email Access:

Watertox Users Panel, IDRC Project: 050280, Roberto Bazzani. Assistance with a mailing list to link the institutions has been requested.

Subsidies for Internet/Email Access:

Research Network in Health Systems and Health Policies for Central America and the Dominican Republic, IDRC Project: 002851 and Health Systems in the Southern Cone of Latin

America, IDRC Project: 000403, Roberto Bazzani. Unganisha assistance has been requested for a web site.

Subsidies for Internet/Email Access:

Promoting Sexual Health (Uganda) II, IDRC Project: 003018, Bertha Mo. Connectivity support has been provided for a researcher.

Subsidies for Internet/Email Access:

Survey on Working Conditions and Health Impact in the Construction Materials Industry (Vietnam); IDRC Project: 003017, Jean Lebel. Unganisha assistance being provided (through TMA Co.) to establish reliable email and training.

Information Policy Research (IPR) or Information and Communication Theme

Project web sites and connectivity activities:

- African Networking Initiative: Defining a Plan of Action, IDRC Project: 002770. Web site includes a database of donors funding telematics projects in Africa.

<http://www.bellanet.org/partners/ani/>

- Gender and Information Technology (APC Women's Networking Support Program), IDRC Project: 001269. The "Global Women's Networking Survey" site includes highlights of the survey findings and a database of women's networking contacts and resources.

<http://community.web.net/apcwomen/>

- IIC Pre-Conference on New Information & Communication Technologies. October, 1996, Munich, Germany, IDRC Project 003222. A "Communications for Development: Applying Information and Communication Technologies to Development Needs" site was established to record the recommendations, the full text of some of the papers presented at the seminar and relevant materials which can be found elsewhere on the Internet.

<http://dialspace.dial.pipex.com/dmtpruett/pcagenda.htm>

- Earth Council Information / Communication System, IDRC Project: 001576. The Earth Council's "Earth Network for Sustainable Development" site includes the full text of reports, several searchable databases and a public distribution list. <http://www.ecouncil.ac.cr/>

- Use of RADARSAT for Natural Resource Management - Costa Rica, Honduras, Panama, Canada, IDRC Project: 001282. The "GlobeSAR 2: Global airborne Synthetic Aperture" site includes a database of projects with images and information about their mid-term conference.

<http://www.ccrs.nrcan.gc.ca/ccrs/tekrd/internat/glbsar2/indexe.html>

- Integrated Conservation Networking System (ICONS), IDRC Project: 002655. The site provides access to database software (based on Microsoft Access 2.0) to manage information on organizations, projects, experts, source materials, laws and other commonly needed information. It has desktop GIS capability. The software is available free of charge to developing country organizations and IUCN members. <http://www.iucn.org/icons/icons.htm>

- Standard Formats For Recording Human Rights Events, IDRC project: 880175. The "Human Rights Information and Documentation Systems International (HURIDOCs)" site includes a

description of the standard formats developed for recording and exchanging information on human rights events and cases. <http://photon-17.iprolink.ch/~huridocs/>

- Integrated Voice and Data Network (IVDN) - CGIAR, IDRC Project: 002947. From IDRIS: "... The general objective of this project is to develop the IVDN as a global information resource on international agricultural research serving the needs of CGIAR, national agricultural research systems (NARS), and others with common objectives. The project will create Home pages on the world wide web providing access to CGIAR information products; develop CGIAR public awareness information; and provide assistance to NARS who do not yet have access to the Internet for publishing. It will also establish an Internet-based repository of CGIAR information products, including software tools, of interest to NARS, and a mechanism for disseminating these by offline methods; and institutionalize CGIAR's efforts to address system-level needs in the area of information and communications (software licensing, standards, etc.) through the establishment of a CGIAR/NARS fellowship program."

Learning for Change - Africa (LCA)

Web site management: no web site

Project web sites and connectivity activities:

- Culture, Éducation et Développement en Afrique, IDRC Project: 003474. An electronic mailing list was established for key actors in education in Africa about strategies for education continent-wide. Some of the participants hired secretaries and research assistants to assist with their participation. A moderator from France and a technician from Toronto were engaged by the project. Final preceding are being prepared.

- Environmental Learning in Communities and Schools in Eastern and

Southern Africa (ELP), IDRC Project: 055264 is planning on establishing email connectivity between partners; developing a regional database through which to collect and transmit data and information on training opportunities, resource materials available and EE practitioners and their activities." They also plan to "establish contacts with policy makers with the view of influencing the emergence of media and information policies that enhance freedom to communicate and share information freely; set up a web site to share and disseminate ongoing national and regional EE activities; promote the use of interactive technologies to enhance community learning through capacity building and networking; undertake participatory research with communities and local institutions, to identify existing technologies; and, policies and practices needed to facilitate the utilisation of new technologies for environmental learning; and, establish relationships and organize fora between communities, educational institutions, and technology developers to enhance cooperation in the development of appropriate technologies." "EcoNews Africa, an NGO based in Kenya will be responsible for...animating communication among partners." from Highlights of the outcome of the Regional Workshop on Environmental Education (EE) in Eastern and Southern Africa. (2-8 November 1997 Nairobi, Kenya)

- L'apprentissage a distance : les technologies de l'information et de la communication au service de l'éducation de base au Senegal, IDRC

Project: 065223. From IDRIS: "...La réalisation des objectifs sera conduite au moyen d'un

centre de production de matériel didactique et de leur hébergement sur un site WEB relié à deux centres locaux d'apprentissage situés en zones rurale et péri-urbaine..."

Prospectus excerpt:

- currently being reviewed

Uganisha assistance:

Subsidies for Internet/Email Access:

Réseau ouest et centre africain de recherches en Éducation (ROCARE) / Education Research Network for West and Central Africa (ERNWACA), Phase III, IDRC Project: 065231, Sibry Tapsoba. Uganisha provided email access for several researchers and full Internet access for several researchers.

Subsidies for Internet/Email Access:

Educational Research Network for Eastern and Southern Africa (ERNESA), Phase III, IDRC Project: 001229, Kabiru Kinyanjui. Uganisha is investigating providing connectivity assistance.

Subsidies for Internet/Email Access:

Environmental Learning in Communities and Schools in Eastern and Southern Africa (ELP), IDRC Project: 055264, Kabiru Kinyanjui. Uganisha provided email or full Internet for several researchers.

Micro Impacts of Macroeconomic and Adjustment Policies Initiative (MIMAP)

Web site management: (interviewed Eshete Hailu)

Web site, connectivity and comments:

- The Ottawa site will include project descriptions with links to the project sites.
- MIMAP centres will be encouraged to create web sites and publish there. The main MIMAP site will reside in Ottawa.
- At this time, there are no plans for an internal site.
- A listserv was established for project leaders. Initially it was used but no one has used it for over a year. There is excellent interaction among the project leaders by email but they prefer not to use the list.

Project web sites and connectivity activities:

Monitoring Adjustment and Poverty (MAP) - Phase III, IDRC Project: 002550 and MIMAP - (Philippines) IV, IDRC Project 003239. MIMAP centres will be encouraged to create local web sites. MIMAP Philippine site is quite comprehensive and includes databases of MIMAP and economic indicators. The site for MIMAP Bangladesh is housed at ASRO.

<http://www.PanAsia.org.sg/mimap/bd/index.html>; <http://pdfi.pids.gov.ph/mimap/>

Prospectus excerpts:

"PAN ASIA has created a virtual network to connect all members of MIMAP and we encourage all MIMAP projects to develop and maintain their homepage where possible. The most advanced team in this regard is the Philippines team and we expect it to eventually develop and maintain a MIMAP web site with the technical support of PAN. This web site will combine individual sites we have or plan to have. Our aim is to support the development of the premier web site on social development issues in Asia, and perhaps internationally.

With the regional expansion of the PI, the African MIMAP teams will have to be connected to both e-mail and the Internet. The PAN network and Acacia Initiative will be involved as appropriate.

These various efforts at increasing connectivity bring with them two noteworthy benefits. One is that it will give MIMAP teams a unique opportunity to be pro-active in the development of the PI. Secondly, it will be relatively easy for researchers to benefit from contacts with the Program Advisory Group mandated to advise on the programmatic development of MIMAP, among other things. As for links to policy, at the country level, a typical MIMAP project brings together a broad range of stakeholders to reach a national "buy in" by policy makers, researchers, donors and NGOs, at every stage of the project. MIMAP teams are invited to develop a dissemination strategy and links with policy-makers at an early stage through technical and policy workshops, policy papers and newsletters."

"Promote the exchange of research results and policy dialogue among countries: ...
Produce monitored electronic journal;
Existing research networks maintained and developed;
Enhanced electronic communication among the MIMAP group;...
South-South and South-North information exchange improved;..."

Unganisha assistance:

Subsidies for Internet/Email Access:

Macroeconomic Adjustment Policies, Health Sector Reform and Access to, Utilization and Quality of Health Care (MapHealth), IDRC Project: 002307, Enis Baris. Unganisha assisted in establishing a mailing list and provided copies of Workplace to Workspace book.

Subsidies for Internet/Email Access:

MIMAP - Benin, Burkina Faso, IDRC Project: 003238, Marie-Claude Martin. Unganisha provided connectivity subsidies to several researchers.

Subsidies for Internet/Email Access:

MIMAP - Nepal Phase II, IDRC Project: 003393, Rohinton Medhora. Unganisha is assisting with connectivity (through ICIMOD).

Minga: Alternative Approaches to Natural Resource Management in Latin America and the Caribbean

Web site management: Gerett Rusnak and Helen Raij

Web site, connectivity and comments:

- This is a clear, well structured site. All the basic information about staff and projects has been included. The complete site is in English and Spanish. The first page and the site directory are also in French. Minga has developed a private web site, which is used by Minga staff to share information; e.g., internal documents, pipeline ideas, travel schedules, etc.

Project web sites and connectivity activities:

- Support to ECOPLATA, IDRC projects: 050224, 50236. The "EcoPlata '96 conference" web site on the LACRO subdirectory includes background papers and the conference declaration. <http://www.idrc.ca/lacro/docs/conferencias/ecoplata.html>

- RIMISP VII Meeting, IDRC Project: 050197. The "VII Encuentro Internacional de Red Internacional de Metodología de Investigación de Sistemas de Producción (RIMISP)" site includes the full text of the conference proceedings. <http://www.rimisp.cl/rimisp7.htm>

- SUP Regional Fund for Agricultural Technology (IDB), IDRC Project: 050187. The "Fontagro: The Regional Fund for Agricultural Technology" site includes several full text documents (pdf), a newsletter and their medium term plan, 1998-2000.

<http://regionalfund.org/aindex.htm>

- Projects with the Consortium for the Sustainable Development of the Andean Ecoregion (CONDESAN), especially the InfoAndina project, IDRC Project: 003356, include several moderated mailing lists, training for participants, document publishing, paper distribution methods, and a document management system. <http://www.condesan.org/infoandi/infoandf.htm>

- Minga Sabbatical Grants, Association of Universities and Colleges of Canada (AUCC), IDRC Project: 050266. The site includes description of grants and application procedures. <http://www.aucc.ca/english/international/program/minga.htm>

- Competitive Grants Program for Research on Monitoring and Evaluation for Natural Resource Management Projects and Programs in LAC, IDRC Project: 050265. The site consists of the project description. <http://www.rimisp.cl/mrni.html>

- Sustainable Management of the Uruguayan Coastal Ecosystem ECOPLATA II (Uruguay), IDRC Project: 931551. The site presents very basic project information. <http://www.fisica.edu.uy/pcmmya/ecoplata/>

- Latin American Symposium on Farming Systems Research (IESA)III , IDRC Project: 050321. This is a site for conference information. (Tercer Simposio Latinoamericano Sobre Investigación y Extensión en Sistemas Agropecuarios IESA-AL III). <http://www.rimisp.cl/iesa3.htm>

Prospectus excerpt:

"Networking and dissemination are essential elements of the PI's work and will be fully integrated into the *modus operandi* of the benchmark areas and research activities supported by the PI. In addition, the PI will support the development of mechanisms to facilitate the synthesis

and exchange of key lessons regarding the role of improved resource management for more equitable and sustainable livelihoods in the four selected ecoregions. The networking and dissemination activities will account for the variety of groups that the PI intends to reach, and will tailor the information products and services to meet their very different information needs and information-seeking behaviour.

The PI's focus on inclusive decision-making processes will be translated into support for dissemination, to the various stakeholders, of information required to understand the complex issues that they must address to bring about positive change in the lives of marginalised populations. The dissemination strategy will target the following groups: Researchers, Other Funders, Policy- and Decision-Makers, NGOs and ENGOs, and Beneficiaries.

Researchers supported by the PI (at present or potentially) will be able to share: the PI's orientations and priorities, concerns, methodological problems, and research results primarily through its Web page (in Spanish and English) and information brochures. New projects will include the necessary funds to ensure that researchers are fully connected to relevant research networks and have access to appropriate information sources on-line. Dissemination of research findings will be supported through electronic media, articles in academic and professional journals, and workshops and seminars.

To reach **Other Funders**, the PI will work closely with IDRC's Business Development Office to develop within the team the skills required for effective fundraising, and to produce high-quality promotional material about research needs for poverty reduction and better NRM. This material will be based on what Centre partnerships have accomplished and can look forward to accomplishing in the future.

Policy- and Decision-Makers in Latin American national, regional, and local administrations hold a major key to long-term sustainability of any gains resulting from the application of research results. As outlined in the Background Section, some policies and resulting legislation, regulations, and programs may effectively help or hinder sustainable development and the efforts of people to overcome impoverishment as they protect the environment from which they draw their livelihoods. Research projects supported under this initiative will have to address ways of reaching key policy-makers at the outset, and demonstrating the benefits of participating in inclusive consultative processes with groups they may not necessarily recognize a priori as valid interlocutors. Communication with decision-makers will constitute a distinct, clearly developed component of the research methodology whenever appropriate in research projects.

Many local and international **NGOs and Environmental Nongovernmental Organizations (ENGOs)** have a long history of working with rural communities to address the problems of concern to this PI. They constitute an important partner group for the PI and the researchers it supports, in that they have active networks that can disseminate research findings. As well, research findings can inform NGO programming activities, and provide essential feedback to researchers. Some of the NGO and ENGO networks with which IDRC is in contact specialize in community communication and can repackage research results.

The ultimate intended *Beneficiaries* of most projects supported by the PI are rural people, a group that warrants special consideration. First of all, they are more likely to be users of information repackaged by a variety of extension services, including those offered by the NGO community, as well as governments and some research centres. Rural people who stand to benefit from research supported under the PI are important among the stakeholders contemplated by the PI in its concern for equity in resource management. To negotiate with other stakeholders on anything approaching a "level playing field," they must be able not only to access useful, timely, and reliable information in a format that is culturally appropriate; they must also be able to exchange information "horizontally," from one rural community to another. Their special position as purveyors of information, not only to researchers but to each other, will be considered explicitly in research proposals, recognizing gender differences in knowledge, information needs, and means of communicating knowledge and information."

PAN Asian Network (PAN)

Web site management: Scott Rattray (Ottawa) and Teresa Wong (Singapore)

Web site, connectivity and comments:

There are 2 PAN web sites. The sites are complementary; i.e., the Ottawa site focuses on PAN team documentation while the Singapore site focuses on project information and outputs. Both have public and private sites.

Ottawa:

- The private site contains meeting notes, contact information, travel plans, work plans and extra project material. So far, it is not used very much. - information on the public site should be selective
- Currently, the Research Officer spends about 10% of time maintaining the web sites for PAN and SMMEIT.
- Because conference calls to Asia are expensive, there has been some experimenting with Chat (parachat).

Singapore:

- The mailing list is used as the PI archives. This site hosts web sites for projects. They offer moderated conferences with keynote papers; e.g., (1) "Participatory Communication: One Approach to Sustainable Development?", 1997-11-10 to 1997-11-29, 464 participants; and forthcoming, (2) "The Right to Communicate and the Communication of Rights", 1998-05-11 to 1998-06-26. There is a list of links to Asian R&D Information Resources (in frames). Some multimedia content is provided; e.g., video, audio.

Project web sites and connectivity activities:

- PAN assists Internet Service Providers in Asia to provide affordable and sustainable Internet services in their countries; e.g., Project 040345, PAN-Bangladesh <http://www.citechco.net/>; Project 003398, PAN-Bhutan; Project 040277, PAN-Cambodia <http://www.camnet.com.kh/>; Project 040279, PAN-Lanka <http://www.pan.lk/main.html>; Project 040307, Project 040307,

PAN-Laos <http://www.PanAsia.org.sg/la01i000.htm>; Project 040224, PAN-Mongolia <http://www.MOL.mn/>; and Project 040276, PAN-Vietnam. PAN also assists the establishments of Information Servers in Asian developing country institutions to enable electronic publishing and use modern networking technologies; e.g., Project 040320, PINS-Philippines <http://www.dost.gov.ph/>; project PINS-Nepal; and PINS-Vietnam.

- Bookmarks: Web-based Development Information Reference System - LAC, Project 050311. This system consists of a searchable collection of more than 600,000 web sites managed by OpenText search engine. <http://bookmarks.apc.org/>

- Community Networking Pilot Projects in Latin America, IDRC Project: 003219. Web sites in Ecuador and Colombia include the project context, objectives, research and impacts as well as descriptions of the 2 components of the project in Ecuador and Colombia.

<http://www.redes-comunitarias.apc.org/>

- *infoDev*: information for development program, IDRC Project: 003110 & 003718. The site lists project proposals as well as approved projects, hosts 2 public discussion lists and has a private section. <http://www.worldbank.org/html/fpd/infodev/>

- Virtual Business Corridors, IDRC Project: 050300. From IDRIS: "This project will install, test and promote a World Wide Web-based electronic business system based on software (TechnoGate Web) developed by the Canadian Advanced Technology Association (CATA) and known as a "virtual business corridor." Virtual business corridors will be set up in four Latin American countries (Argentina, Brazil, Chile and Uruguay). At least 20 small- to medium-sized, technology-intensive firms from each country will be profiled and given the help they need to design, implement and maintain their own Web pages. They will use the virtual business corridor to enhance their business communications, increase research and development (R&D) cooperation, and promote strategic alliances and partnerships. The initial focus will be on links between the four Latin American countries and Canada, but the corridor will also be available to link Latin American businesses with each other and to TechnoGate partners in other parts of the world. A major component of this project will be groundbreaking research on tools for promoting innovative partnerships using the World Wide Web."

- Internet Content Development - Papua New Guinea, IDRC Project: 003638. From IDRIS: "This project aims to improve access to international networking and information technologies by Papua New Guinea (PNG)'s research and development community... Specific activities will include forming an Internet Publishing Group representing selected institutions; establishing a training and access facility hosted by the South Pacific Centre for Communication and Information in Development (SPCenCIID) at the University of Papua New Guinea (UPNG); providing selected institutions in the research and development community with modest direct assistance for Internet access and publishing; building the base of PNG Internet-accessible national research data; and providing an avenue for informed discussion of and investigation into pressing issues concerning the Internet in PNG, including remote area access via telecentres and access for women's groups and other non-governmental organizations (NGOs)."

- Virtual Information Centre for Management Development (India), IDRC Project: 003946. From IDRIS: "...This project will enable ASCI [Administrative Staff College of India] to acquire an Internet browsing and communication facility with a minimum of 6-8 terminals and offer the following services to its clients: a virtual library in support of its training programs, Internet-based information and consultation, list servers, electro bulletins, online registration, and online subscription..."

- Distance Education - (China) Content, Technological and Business Definitions, IDRC Project: 040416. From IDRIS: "...This project will allow further definition of the content, information and networking technologies, and business arrangements that are prerequisites to preparing the actual project proposal..."
- Asian NGO Coalition Electronic Network, IDRC Project: 003636. From IDRIS: "...Communication within the network has been mainly limited to the traditional mode, and communication by e-mail has only recently begun among nine members. This project will enable ANGOC [Coalition for Agrarian Reform and Rural Development] to take advantage of the opportunities offered by the Internet in terms of communication and information exchange - including electronic conferencing, electronic publishing and electronic marketing - to strengthen its network activities and enhance its advocacy efforts on identified issues."
- SME Support Organisations Network - Asia, IDRC Project: 003945. From IDRIS: "...This project will establish an electronic network between Technonet Asia member organisations and develop new information services based on the Internet. The specific objectives are to connect each of the participating institutions to the Internet and develop their capacity to network, thus providing improved information services based on the needs of SMEs. The project will also prepare SMEs for cyber business promotion and help them gain access to international markets through the Internet. A World Wide Website will be set up to help SMEs and their support organisations establish global linkages."
- Internet for Northern Pakistan, IDRC Project: 004017.
- Satellite Broadcasting Web Centre for Secondary Schools in Mongolia, IDRC Project: 003810. From IDRIS: "This project will introduce and operate the first educational World Wide Web Centre for Mongolian provincial schools and provide technical assistance for the development of a national information broadcasting network for provincial schools. The project addresses the issues of extending access to information to marginalized social groups, creating Internet materials in a local language, and researching the impact of information and communication technologies on remote communities... Training will be organized at the Public Internet Centre of DataCom Co., Ltd. of Ulaanbaatar. The project will have its own homepage."
- Web-based audio-visuals on Sustainable Development - Latin America, IDRC Project: 003779. From IDRIS: "...This project will enable the Red de America Latina (RAL), based in Montevideo, Uruguay, to develop a pilot website listing audiovisual documents produced in Latin America on sustainable development. The project will look at the possibility of including samples of the videos on the web. The project will use MINISIS software and its Web interface package."
- Impact of Information Technology in Rural Areas - India, IDRC Project: 003778. From IDRIS: "...This project will assess the impact of information and communication technologies on the transition to sustainable agriculture and rural development. It will also document their role in promoting knowledge-empowerment in rural families. Researchers will set up six village information shops providing e-mail and World Wide Web access, and operated by educated youth, especially women..."
- Rural Development Communications Network, IDRC Project: 003637. From IDRIS: "...This project will provide an electronic communication platform by connecting the rural development ministries of CIRDAP's member countries and their designated research and development institutions, to the Internet... This project will test e-mail and Internet access at the two divisional libraries and establish linkages with CDL's central office; publish an electronic journal on

development issues; organize e-mail and Internet user training in the divisional centres and central office of CDL ; and establish a website of CDL publications."

- PAN - Vietnam National Intranet, IDRC Project: 040342. From IDRIS: "...The project will strengthen ... their capacity in information management and service, and Intranet and Internet publishing; and sensitize potential governmental and nongovernmental R&D organizations to Intranet information networking and obtain their active participation to develop a national web site of Vietnamese R&D research information and publications."

- PAN - APCC Coconut Information Network, IDRC Project: 040341. From IDRIS: "...The project will provide electronic mail (e-mail) and Internet access to APCC [Asian and Pacific Coconut Community] member institutions and assist national programs by providing training for national coconut information specialists. Coconut-related information will be packaged for publication on the World Wide Web; a pilot program of electronic publishing and on-line access to APCC databases will be developed; and the cost and benefits will be determined. The project will also test e-mail and Internet connectivity with selected stakeholders (researchers, producers, policymakers, processors, etc.) to determine future needs; and develop and test the efficiency of computer conferences for discussions between APCC member institutions and stakeholders."

- Electronic Networking for Sustainable Mountain Development (ICIMOD), IDRC Project: 040278. From IDRIS: "...This project will develop a network of research and development institutions in Nepal based on the Internet and linked to the Pan Asia Network (PAN) Program of IDRC... The project will develop capacity within each participating institution to collect and process information for publishing on the Internet. It will constitute a resource team of networking experts in Nepal able to provide leadership and support to networking activities. A web site for Nepalese research and development publications and other information will be developed and linked to PAN and other regional/international networks. Also, the project will provide a demonstration or "drop-in" Internet site at ICIMOD to promote the use of Internet in the country."

- Expanding Audience & Capacity of Electronic Networks for Sustainable Development, IDRC Project: 003001. The site includes some full text documents and many links to resources on partner sites. From IDRIS: "The project will place special emphasis on several links with developing regions and Eastern Europe. IISD will seek more animated use of World Wide Web sites through improved consideration of design, user dialogue, and better information filtering. Project participants will develop the initial network of cooperating organizations; design and implement an interactive interface and tools to help decision-makers make optimal use of the information provided through the network; expand the knowledge base through linkages to information resources held on-line by key organizations around the world; and balance the knowledge base with input from regions throughout the world." <http://sdgateway.net/>

- Uganisha: The connectivity project, IDRC Project: 003192. Uganisha maintains a web-to-email gateway; published the book: "From Workplace to Workspace: Using Email Lists to Work Together", produced an inventory of IDRC project web sites; initiated the roaming email services (now managed by MIS); provides technical advice, training and subsidies for connectivity to IDRC project recipients and Pis; is establishing Help Desks in several African countries for use by IDRC project recipients; is producing a modular Internet training package for IDRC project recipients with emphasis on training the local trainers; is preparing an overview of Internet technologies with emphasis on the use of the technologies by IDRC project recipients and Pis; is conducting a survey of Internet use by IDRC staff and projects; is preparing a resource kit for

universities in developing countries to get connected to the Internet; and is testing connectivity technologies; e.g., LINUX server, handheld computers, chat services and videoconferencing.
<http://www.idrc.ca/unganisha>

- A Network for Research on Software Tools for Land Management (HUMUS Network), IDRC Project: 003865. The "HUMUS Network: Software for Land Management" site will include a database of network members. <http://unganisha.idrc.ca/humus/>

Prospectus excerpt:

"The specific objectives are:

Connectivity Infrastructure

To determine how the least-developed countries and communities can best achieve sustainable and adequate national and local connectivity, participate in global network resources (Internet), and develop local expertise in computer networking.

Content Development

To assist research and development organizations in developing countries to build the capacity and the resource base needed to develop local information materials that can be published on the Internet and other computer media.

Communication and Networking

To determine how researchers and development workers can best use Internet technology to help solve local development problems and share knowledge, research results, and community experiences on a global basis.

Collaborative Research on ICTs and Policies

To support research on technology adaptation and deployment, policy and regulatory issues, and the social and cultural impacts of the Internet."

Unganisha assistance:

Subsidies for Internet/Email Access:

PAN - Vietnam National Intranet, IDRC Project: 040342, Renald Lafond. Unganisha assistance being provided (through TMS Co.) to establish reliable email and training.

Technical advice:

A Network for Research on Software Tools for Land Management (HUMUS Network), IDRC Project: 003865, Zbigniew Mikolajuk.

Unganisha assisted the HUMUS network to develop a project proposal using the Internet; to establish a web site on an IDRC server and with a mailing list humus-cl.

<http://unganisha.idrc.ca/humus/>

People, Land And Water (Africa And The Middle East) (PLAW)

Web site management: Jamie Schnurr

Web site, connectivity and comments:

- The PI has decided to keep the web site simple so that the maintenance is low.
- Agora Communications (Mark Faul) has been hired to do some of the web work.
- PLAW-cl is very active but other mailing lists, involving researchers in developing countries, are not very active.

Project web sites and connectivity activities:

- Electronic Conference on Livestock Environment Interactions - GLOBAL, IDRC Project: 003269. This document describes the lessons learned from a global electronic conference: "Guidelines For Organizing An Electronic Conference: Lessons From The Global Consultation on Balancing Livestock, Environment, and Human Needs" which involved more than 1,000 participants. http://www.idrc.ca/unganisha/document/global/index_e.html
- Soil Improvement in Africa: Potential Role of Ramial Chipped Wood Workshop, IDRC Project: 003809. The site, "Projet d'implantation de la technologie des BRF en Afrique : développement et recherche en agroforesterie appliqués à l'agriculture et à la forêt", consists of the project report in .pdf. <http://forestgeomat.for.ulaval.ca/brf/>

Prospectus excerpt:

"PLAW's success will depend on continuous communication and interaction among team members, on discussion with outside partners, and on constant communication of all partners with final beneficiaries. To some extent this is already happening due to electronic and other connections activated with and by PLAW projects like the African Highlands Initiative (AHI). PLAW is also benefiting from connectivity efforts undertaken by partner donors, such as the USAID "Africa Link" project that connects members of several agricultural research networks in SSA. Some of PLAW's projects will provide context and content to Acacia efforts, such as the AHI already mentioned. Improved connectivity for enhancing PLAW's interaction with partners will continue to be of concern of the team, especially during the design and start-up of new projects. Recently PLAW, in partnership with Minga in IDRC, and ILRI, an external partner, supported a global electronic conference on the role of livestock on the degradation of land or restoration of degraded land. This consultation raised awareness and solicited views on research priorities from more than 1,000 participants in 84 countries. PLAW has installed a Web Page on the Internet, as part of IDRC's Home Page. It will be constantly updated with information about PI activities and relevant results."

Connectivity section of PI Management and Program Delivery:

- "- Do connectivity contributes to meeting objectives? Why? Why not?
- How could connectivity be improved? Through what means?"

Unganisha assistance:

Publication:

Electronic Conference on Livestock Environment Interactions - GLOBAL, IDRC Project: 003269, Don Peden. A publication, "Guidelines For Organizing An Electronic Conference:

Lessons From The Global Consultation on Balancing Livestock, Environment, and Human Needs" which involved more than 1,000 participants, documents the methods used and the lessons learned.

Peacebuilding and Reconstruction (PBR)

Web site management: Erin O'Manique and Robert Opp

Web site, connectivity and comments:

- The site contains a comprehensive description of the PI and includes a list of projects with abstracts, documents and other resources, and links. Most of the site is bilingual.
- If PBR projects are to use electronic mailing lists, they must be secure.

Project web sites and connectivity activities:

- Environmental Policy Initiative: Phase I, IDRC Project: 003746. From IDRIS: "...The outputs will be disseminated through policy submissions, fact sheets for both communities and decision-makers, teaching guides, a World Wide Web page and workshops."
- Global Internally Displaced Persons Survey, IDRC Project: 003733. From IDRIS: "...produce an annual worldwide survey and analysis of IDP issues, and a quarterly newsletter; build a country-by-country database of IDPs; maintain a website; and build a network of interested non-governmental organizations (NGOs), multilateral agencies, research institutes and individuals. The overall aim is to identify and document serious situations, develop methodologies for the collection of accurate statistics, and alert the international community to the worldwide status of IDPs."

Prospectus excerpts:

"iii) The application of information and communication technologies (ICTs) in the context of peacebuilding:

ICTs can be a powerful tool for social transformation by providing unprecedented opportunities for sharing information, building coalitions and publicising injustices. They contain the potential, in the hands of communities (geographic communities or communities of interest) in post conflict settings, to facilitate shared understanding of divisive issues, by opening access to information they can promote fresh thinking and the formulation of new alliances. Their inherent transparency makes it impossible to hide gross abuses of power. Connectivity will be embedded in PBR projects in order to examine whether and how these opportunities can be realised particularly in the resolution of conflict at the community level.

Projects in this area will also capitalize on the opportunities made possible by new technologies and communication methods to enhance peacebuilding and reconstruction efforts through the rapid generation and dissemination of information, and creation of specialized networks among experts and practitioners working on key areas of peacebuilding such as humanitarian relief,

reintegration of war-affected populations, demobilization and demining.

The selection of the above priority areas is partly based on IDRC's current work in the selected countries. However, the three areas interact in important ways to shape the reconstruction process and thus provide a useful framework for identifying country-specific priorities. Violent conflicts undermine or destroy a society's basic institutions, both at the level of the state and of civil society. Peacebuilding, therefore, involves creating new institutional and policy frameworks to facilitate the establishment of a new and non-violent social order. In this context, the creation of alternative policies and policymaking institutions for the management of natural resources is one of the main challenges in post-conflict societies. Since competition over resources has been a major source of violent conflicts, the establishment of equitable and sustainable resource management frameworks would reduce the potential of eruption of fresh conflicts. Access to information and communication technology is a crucial prerequisite for maintaining wide and effective popular participation in the above institution building and policymaking processes. It may also add significantly to the weight of popular voices in relation to all levels of government and influence the balance of power in a transitional environment. In other words, while the three priority areas are not all-encompassing, they allow for sufficiently interrelated yet country-specific programming."

"Networking, Dissemination and Connectivity

There are a number of target audiences to which the networking, dissemination and connectivity strategy of PBR will be addressed. There is interest at many levels in what works and what does not work in peacebuilding settings:

- local communities that are a focus of a number of projects in the present pipeline and whose access to resources and capacity to influence political processes will ultimately determine the sustainability of peacebuilding and reconstruction efforts;
- researchers working on individual projects who will need to share lessons learned, preferably in real time, with project staff working on other PBR projects as well as with the larger peacebuilding and reconstruction research community;
- IDRC program officers working on the same issues as PBR but in a more purely developmental context (PLAW, CBNRM, SUB, ASPR and Acacia, for example);
- Canadian partners, participating in - or likely to play a role in - PBR projects;
- international policy-makers in a position to apply PBR lessons to their programs; and
- Canadian foreign policy, development assistance and NGO communities which are involved in designing the Canadian response to the needs of countries emerging from conflict.

The design of the PI - with its three programming approaches, and its three priority areas - suggests possible groupings for initial networking and connectivity efforts which could be progressively integrated over time.

It might be useful, for example, to link, both virtually and through periodic meetings, the institutions working on natural resource management, and to connect this network to local researchers and officials and to establish a policy that any new project in this area would from the outset be drawn into the network in whatever country it was located. It might also be useful to ensure that all lessons learned from the country-specific and comparative elements of the program are packaged similarly, in both print and electronic form, in order that the PI develops 'brand recognition' within the policy community. Possibilities such as these will be addressed in the detailed programme to be developed in FY1. It will be based on a careful assessment of priorities with respect to networking and connectivity and a clear determination of the prime targets for policy messages.

FY1 will also see the development of a PBR Homepage and its linkage with related World Wide Web sites. While there will be an emphasis on connectivity among researchers and dissemination through electronic means, more traditional face-to-face encounters will be built into the strategy to capitalise on key outputs."

Small, Medium and Micro-Enterprises, Innovation, and Technology (SMMEIT)

Web site management: Scott Rattray

Web site, connectivity and comments:

- Messages are received from the email address posted on the bottom of the web pages.
- Listserv not used very much by the PI and there are no listservs for communication with projects.
- Plans for the site include making it more of a resource for recipients; e.g., expanding project information; including email of researchers; adding conference info; starting a bulletin board where messages could be posted and displayed on the same web page by subject (threaded); and posting more research results; e.g., final reports, evaluations, lessons learned, and other outputs.

Project web sites and connectivity activities:

- Support for Bednets - TDR & NetGain Africa ITN Task Force, IDRC Project: 003229 & 003390. The site, "Work plan of the Task Force on Operational Research on Insecticide-impregnated Bednets, January 1998, UNDP/World Bank/WHO Special Programme for Research & Training in Tropical Diseases (TDR)", includes rationale, objectives, technology, implementation, promotion, expected outcomes, possibilities for collaboration, and work plan. Path Canada also has a site: "Net Gain for Africa Task Force: Increasing the availability of insecticide-treated nets for malaria control in sub-Saharan Africa through public-private partnerships". <http://www.who.ch/tdr/workplan/1997/bednets.htm> & <http://www.synapse.net/~path/nete.html>

- Malaria Interventions for Child Survival (Africa), IDRC Project: 001375. PATH Canada's "Malaria Control" site includes a bilingual full-text newsletter, project descriptions and a directory of suppliers of insecticides and mosquito nets for sub-Saharan Africa.
<http://www.synapse.net/~path/malaria.html>
- Industrial Restructuring, Innovation & International Competitiveness in Latin America, Ph II, IDRC Project: 003077. The site, "Reestructuración industrial, innovación y competitividad internacional en América Latina", consists of a project description.
<http://www.eclac.cl/english/Projects/ctpd/can97s25.html>
- SMME Support Institutions Network - Southern Africa, Project: 002842. The project will provide each of the institutions in the network with e-mail and, as it becomes available, Internet access.
- from the prospectus: "A project in Southern Africa is already working to establish electronic links among key enterprise support institutions, while in Egypt support to the newly-established Egyptian Small Enterprise Association will for the first time provide a forum for interaction between researchers, NGOs and government agencies active in the field." project numbers?
- URR IDRC and International Federation of Institutes for Advanced Study (IFIAS) Knowledge-Brokering Initiative: Pilot Study, IDRC Project: 003224. This site has Internet, intranet and extranet capabilities, includes public and private mailing lists, and is structured to encourage information exchange; however, the site is almost empty and inactive.
<http://www.knowledge.broker.org/>

Prospectus excerpt:

"Results of the PI's work will be disseminated through publications and workshops, as well as the PI's own WWW site and those of recipient and partner agencies. The PI will also promote policy dialogues among researchers, governments, NGOs and private sector bodies, and will work to foster electronic connectivity among SMME support institutions. A project in Southern Africa is already working to establish electronic links among key enterprise support institutions, while in Egypt support to the newly-established Egyptian Small Enterprise Association will for the first time provide a forum for interaction between researchers, NGOs and government agencies active in the field."

Sustainable Biodiversity (SUB)

Web site management: Erin O'Manique

Web site, connectivity and comments:

- The PI plan is included. Along with biographies of the team members, bios of resource people were also included. The site is available in English only. The links need to be checked, several do not work. A section on medicinal plants is difficult to find. A section of To the World, "Biodiversity and Indigenous knowledge", was created and there will be a link to it from the SUB site soon.
- For SUB, many of the projects recipient organizations are rural NGOs so they may not have access to email or may have access to communal email only. The PI has not been active in promoting ICTs use in projects

Project web sites and connectivity activities:

- The Crucible Project: Alternative Legislation on Intellectual Property Rights II (Global), IDRC Project: 004015. This project is in the process of establishing an electronic discussion group.
- Community Biodiversity Development and Conservation Progra, IDRC Project: 00813. The Rural Advancement Foundation International (RAFI) site, "Enclosures of the Mind Intellectual Monopolies: A Resource Kit on Community Knowledge, Biodiversity, and Intellectual Property" consists of an 88 page document in .pdf. <http://www.rafi.ca/rafi/eotm/index.html>
- Medicinal Plants Network Phase II, IDRC Project: 045021. The site, "IDRC Medicinal Plant Network (IMPEN)", includes general information about the project. <http://www.idrc.org.sg/biodiversity/impn.html>
- Indigenous Biodiversity Information Network (IBIN) (Global), IDRC Project: 003247. The site. "Indigenous Peoples Biodiversity Information Network (IBIN)", includes several public discussion fora which have been very inactive, there are several unconnected lists of links and many of the sections are blank; e.g., news (since May 1997), databases, library, projects and contacts. <http://www.ibin.org/>
- TRAMIL: Central American Network on Medicinal Plants, Phase II, IDRC Project: 003233. The site ENDA-Caribe site, "TRAMIL: Programa de investigación aplicada a la medicina popular del Caribe", includes project information. <http://www.funredes.org/endacaribe/Tramil.html>
- Publication of Report on Non-Timber Forest Products, IDRC Project: 004105. From IDRIS: "...This grant will finance the updating and publication of the book on IDRC's World Wide Web site as one of the Centre's Focus Series. The title of the publication will be "Non-timber Forest Products: a Production to Consumption Systems Approach to the Literature.""

Prospectus excerpts

"SUB has built support for research networks that are global, such as the Community Biodiversity Development and Conservation Network and the Indigenous Knowledge Program, as well as regional networks in Latin America and Central America, Asia, and Africa. In the next three years, SUB will seek ways to enhance the impact of these networks by fostering exchanges among these networks, and by facilitating connectivity within and between these networks using electronic and other means.

The dissemination strategy of the SUB PI will emphasize the publication and sharing of research results, and will promote recognition of the work and success of our research partners. Target audiences include communities and local research institutions as well as national and international policy makers whose concerns include, or should include, biodiversity. Lessons learned will be disseminated through IDRC Books and electronic means such as the World Wide Web, but the PI will also strive to maintain more personal approaches where required."

"The SUB PI will continue to emphasize the connectivity of the networks. An example of previous support is the establishment of the Indigenous Biodiversity Information Network (IBIN) for information on biodiversity customized to the needs of indigenous peoples, using Internet

technology for information exchange and communication. In collaboration with the Uganisha (Connectivity) Project, support will be provided to the above key networks such as the CBDC to ensure their access to effective communication and dissemination of research results through electronic means. As well, the SUB PI will explore how to develop more effective methods and strategies for communicating via this medium."

RSA: "*Création sur Internet d'un site en français sur les produits naturels et d'un CD-ROM*
\$125K

Cette proposition, qui pourrait intéresser à la fois les initiatives SUB et SMMEIT, a été reçue de l'Institut canadien de produits naturels tropicaux par l'entremise de M. Malo Nianga. Elle a pour but la création de bases de données en vue de promouvoir la recherche et de soutenir l'industrie et les petites et moyennes entreprises sur les produits naturels à base de plantes."

Uganisha assistance:

Technical Advice:

The Crucible Project: Alternative Legislation on Intellectual Property Rights II (Global), IDRC Project 004015, Chusa Gines/Michael Halewood. A very private mailing list is being established with guidelines for use; a facilitator; and a temporary web site for document sharing prior to a conference.

Subsidies for Internet/Email Access:

Participatory Plant Breeding in High Altitude Villages of Nepal, IDRC Project: 003094, Daniel Buckles. Uganisha is assisting with connectivity (through ICIMOD).

Trade, Employment and Competitiveness (TEC)

Web site management: (interviewed Eshete Hailu)

Web site, connectivity and comments:

- This is a very basic web site but the full-text prospectus does provide all the essential PI information. There is a section for working documents.

Project web sites and connectivity activities:

- African Economic Research Consortium - Phase IV, IDRC Project: 003161. The site includes general information about the consortium. <http://www.tomco.net/~edinp/africa/aerc.htm>

- Economics and the Environment (Colombia) & Macroeconomic Research Network (Latin America) IV, IDRC Projects: 000763 & 002879. The site, "FEDESARROLLO: Fundacion para la Educacion Superior y el Desarrollo", includes basic information about the foundation their publications and upcoming conferences and seminars.

<http://www.openway.com.co/fedesarrollo/>

- G-24 Technical Support Service III, IDRC Project 002881. Some publications are listed with order information. <http://www.unicc.org/unctad/en/pressref/primfi.htm>

- Leading Issues in International Trade Relations - Latin America, IDRC

Project: 003392. From IDRIS: "...The compiled results will be made available to as large an audience as possible. Policymakers, academics, researchers and civil society organizations will have access to the results via the traditional printed mediums (book, policy papers and newsletters), as well as electronically through the Internet."

- Trade and Sustainable Development Knowledge Network, IDRC Project: 003460. The site, "Knowledge Networks: Capacity Building for Trade and Sustainable Development", contains basic information about the project with a link to a .pdf version of the complete proposal. From IDRIS: "...This first-phase activity will include country studies and workshops, thematic papers, and networking through the Internet... The third part will consist of construction and maintenance of a knowledge network on trade and sustainable development. The major collaborators will consolidate existing information online, adding to it where gaps exist, and link the research partners with each other via the Internet." <http://iisd1.iisd.ca/trade/knownet.htm>

Prospectus excerpt:

"Dissemination, Connectivity and Networking

Constructive collaboration among researchers from different environments and wide dissemination of research results are clearly an integral part of the process of sound research. IDRC's long experience as a knowledge broker (see also section VI below) at both the North-South and South-South levels and the emergence of new, powerful forms of communication and interaction facilitate good collaboration and wide dissemination as never before.

Building on the experience with past efforts in collaborative research through networks especially in the former Social Sciences Division, almost every project we intend to support will be a cross-country effort, either regional or global. This approach brings researchers who normally do not interact or work with each other (except occasionally at one-off meetings and seminars) together for the life of a project (or more), and allows the synthesis of experiences from a wide variety of countries, using a common (and therefore comparable) approach and methodology.

The Internet makes such contacts easier and cheaper, but cannot create togetherness on its own accord. In some of the projects outlined above, a list serve will be the primary mode of communication within the research group (including members of this PI). Individual projects will also have some funds made available to enable contact between research groups, on a case by case basis. For example, there are clear synergies between the several projects dealing with Africa's particular situation in the new trade system. The unique and promising situation in South Africa suggests that there are large gains to be made from integrating it into studies in other parts of the world, particularly Latin America's Southern Cone countries and the successful adjusters in Asia. Finally on the matter of synergy within the activities of this PI, the activities including and especially interim and final outputs of all our projects will be shared routinely with key members of the other projects. This way contacts and possibilities where none had been envisioned (or could have been envisioned) at the start of the research cycle will develop along the way, and the Internet will enable these to develop further and flourish. This is also where the potential to work with IDRC's Connectivity initiative is most evident, and will be pursued as appropriate.

As part of a Centre-wide effort to follow-up on the recommendations of the Strong Report, we are working with the International Institute for Sustainable Development in Winnipeg and the North-South Institute in Ottawa to create a network of international institutions that will develop capacity in and put in place mechanisms to develop a civil society around key issues in the trade and sustainable environment sphere. This will comprise many Southern institutions such as FLACSO in Latin America and China's International Trade Research Institute as well as institutions in Europe and the U.S.

Given all the attention paid to trade in the world, our efforts can only make a difference if the individual investments we make in our various activities then also benefit from the networking synergies that they breed or that are nurtured and developed by IDRC. This enhances the productivity of our resources by making the whole amount to more than the sum of its parts.

Although only development activities will occur in the first year, the medium term (ie years II and III) aim of this PI is to be a principal centre of research and dialogue on leading issues pertaining to international trade related to developing countries. Integral to this plan is the development of a web site containing rigorous, critical and non-partisan information about and analysis of the North-South trade dialogue. Rigorous because we will only place output that is the result of a solid research process including peer review and comment. Critical because our networks themselves comprise researchers and views of diverse intellectual and geographic backgrounds and experiences. Non-partisan because in this whole process IDRC itself promotes no particular point of view save a policy-oriented and capacity building approach to research for development.

Traditional forms of dissemination will continue, and in fact will remain at the core of the final stages of our projects. The track record of publication (with reputable commercial publishers like Macmillan, Routledge and Lynne Rienner) of the output of past economics-oriented networks is good and we fully expect to continue to utilize this avenue of dissemination. The international distribution and prestige associated with such publications, though "academic", is important for the impact that our results have on the research and policy community, co-funding efforts and the reputation of the Centre as a leading research support organization (see Annex I.)

But that in itself is not enough. We fully recognize the importance of more applied and direct forms of dissemination which have always played a large part in our past and current projects. In a PI such as this, informing the wider research and policy community of developing country perspectives on trade must and will include seminars nationally, where policy makers and NGO representatives will participate, and internationally, at organizations such as the OECD, UNCTAD and the development banks.

Taken together, our several dissemination and networking efforts will at the first instance link researchers in various parts of the world to each other. Parallel efforts to widen the research circle by bringing in national and international policy makers and NGO representatives not just at the dissemination stage but throughout the project planning and implementation process will also be made."

Uganisha assistance:

Subsidies for Internet/Email Access:

Finance and Changing Trade Patterns in Developing Countries, IDRC Project: 003252, Rohinton Medhora. Uganisha is assisting with an upgrade to their LAN and with connectivity.

Subsidies for Internet/Email Access:

Leading Issues in International Trade Relations - Latin America, IDRC Project: 003392, Rohinton Medhora. Uganisha is assisting with connectivity.

Subsidies for Internet/Email Access:

Secretariat for Institutional Support for Economic Research in Africa (SISERA), IDRC Project: 065077, Réal Lavergne. Uganisha is investigating Internet access via the LANs for several member institutes.

Miscellaneous

Uganisha assistance:

Subsidies for Internet/Email Access:

Corneal Infections (Nepal) III, IDRC Project: 001214, Enis Baris. Uganisha is assisting with connectivity at Tribhuvan University (through ICIMOD).

Secretariats

African Technology Policy Studies Network (ATPS)

African Technology Policy Studies Network (ATPS), IDRC Project: 920418, Brent Herbert-Copley.

Uganisha assistance:

Subsidies for Internet/Email Access:

Uganisha assistance provided to several researchers; e.g., telephone lines, ISP subscriptions, modem, training and computer upgrades.

Bellanet

Bellanet : a global forum for sustainable development research and capacity development, IDRC Project: 002037, David Balson.

Web site management: Katherine Morrow (interviewed Rebekah Jamieson)

Web site, connectivity and comments:

- <http://www.bellanet.org/index.html>
- The site includes a description of the Secretariat, a regularly updated newsletter, staff biographies, collaborative initiative and project abstracts, many open and closed mailing lists, an extensive review of the Secretariat, and collaborative planning tools (e.g., web-based dynamic databases).
- As well as the development and maintenance of static web pages, several Bellanet staff have been developing dynamic database applications using Cold Fusion. There are plans to move Bellanet to a cold fusion system so that changes can easily be applied to the entire site.
- Many mailing lists are managed and moderated by Bellanet staff.
- Bellanet is developing a lessons learned archiving system.
- They are working with Sida on a project database.

One page description excerpt (w:\programs\secretar\1pg-desc.all):

"The Secretariat maintains a small team of specialists who work with partner agencies, with Collaborative Initiatives, and with Bellanet's in-house projects. Each effort is intended as a 'best practice' use of ICT for development. The Bellanet approach is to support the development of distributed capacity. Bellanet is not a direct provider of ICT services, nor is it a funding agency." "It aims to demonstrate how ICT-enhanced environments overcome the obstacles of time, space, and the resource constraints which hamper development efforts."

Unganisha assistance and cooperative projects:

Publications & New Technologies:

- Bellanet and Unganisha have worked collaboratively on several projects: (1) the book "From Workplace to Workspace", (2) web-to-email gateway, (3) an Extensible Markup Language (XML) system for the development community, (4) a web-to-email gateway, and (4) cold fusion interface to databases.

Economy and Environment Program for South East Asia (EEPSEA)

Economy & Environment Program for Southeast Asia (EEPSEA) Phase II, IDRC Project: 040264, David Glover.

Web site management: Catherine Ndiaye

Web site, connectivity and comments:

- <http://www.idrc.org.sg/eeepsea/index.htm>

This is a basic but informative web site which includes a full text journal, the Annual Report, course information, Guidelines for Research Proposals, descriptions of various awards, many full text documents and links to related sites.

Annual Report 96/97 excerpts:

"The Website was considerably expanded to include more EEPSEA Special Papers, Research Reports, Policy Briefs, information about courses and fellowships and links to several other environmental economics Websites. The site receives an average of 1,450 "hits" or visits per month. (The Website homepage can be seen in an annex to this report.)

The linked Websites include the Beijer Institute, IIED/CREED, Resources For the Future, World Bank, CSERGE, EEU (University of Goteborg), EEEM (University of York), Nautilus Institute, Wuppertal Bulletin of Ecological Tax Reform. By clicking on these links one can find news about publications, courses, conferences and other environmental economics events around the world. Several of these sites have reciprocal links to EEPSEA.

G) NETWORKING AND COLLABORATION

EEPSEA continues to play an important role as an information clearing house and resource base for the region. A major expansion of the outreach program was undertaken in 1996, including expansion of the Website and mailing list. These need to be continuously maintained, improved and updated. Efforts have begun to facilitate the formation of national environmental economics associations, which can serve as a link with EEPSEA's regional program.

Collaboration with other organizations active in environmental economics continues. Agencies with which EEPSEA is in frequent contact include World Bank, EDI, IIED, the University of Goteborg, the Beijer Institute, ADB (particularly its APREETA training program in extended cost-benefit analysis), the EENESA and EENLAC environmental economics networks in Africa and Latin America; and the AERC macroeconomics network in Africa."

"As EEPSEA's exposure grows and the WorldWideWeb becomes increasingly accessible, EEPSEA has attracted more applications from SE Asians in overseas PhD programs."

Environmental Management Secretariat, LACRO

Environmental Management Secretariat (LAC), IDRC Project: 050116, Carlos Sere.

Web site management: Andrea Puppo? (LACRO)

Web site, connectivity and comments:

- <http://www.chasque.apc.org/sema/>

- This site is hosted by Chasque and includes general information about the Secretariat, pointers to related sites and funding application procedures.

From the EMS Internet site:

"The objective is to assist the improvement of environmental management in LAC through the application of three inter-related instruments -research, horizontal cooperation and information systems (largely Internet based) to support decisions by those engaged in policy formulation and implementation.

The increasing accessibility of the Internet creates the opportunity to further incorporate local issues into a wider picture, and has been chosen as the most effective medium for the EMS program."

"The EMS will facilitate the translation of "perceived needs" of the users into effective demand using latest information and communication technology (mainly Internet) as the primary vehicle. This will be expressed through various activities and services including the following:

- developing and maintaining relevant data bases drawing on international sources;
- progressive expansion of the inventory and characteristics of LAC entities in research or technology transfer with competence in the relevant fields as well as external institutions which may complement regional capabilities;
- providing a communication/match-making mechanism and brokering service over the Internet (eg; forums, conferences, courses, listservs) among universities, consulting firms, NGOs, government research agencies and national user nodes for the execution of research, evaluation or facilitation of horizontal cooperation on environmental management questions."

Essential Health Interventions Project (EHIP)

Essential Health Interventions Program, IDRC Project: 001047, Eva Rathgeber.

Web site management: Flora Shiroya (?)

Web site, connectivity and comments:

- <http://www.idrc.ca/ehip/index.html>
- The web site currently resides on the Ottawa server but there are plans to move it to EARO.

Uganisha assistance:

Technical Advice:

- Uganisha staff sourced and chose computer technology (e.g., 2nd hand laptops) and assisted with obtaining a solar power source for EHIP staff in Tanzania.

Foodlinks

FoodLinks Initiative, IDRC Project: 003666, Bill Edwardson.

Web site management: Lori Jones

Web site, connectivity and comments:

- <http://www.idrc.ca/foodlinks/index.html>
- This Secretariat will be ending in mid-1998. Now there is a basic information sheet which is somewhat out of date. A new section of the web site was being developed for the Global Collaborative Postproduction network. A list of annotated links with subject headings to relevant post-production sites was developed and was being tested.
- A draft project tracking system has been developed (<http://www2.idrc.ca/~gregs/foodlinks/>).
- The public are using the email listed on the site to send requests to Foodlinks.
- The project recipients are at various stages of connectivity--most have email.
- A project was being developed with 2 Indian recipients in different geographic locations in which they would be using mailing lists to link them.
- An electronic newsletter is being distributed from here for PRODAR (Cooperative Program for

Development of Rural agroindustry in Latin America and the Caribbean)

Unganisha assistance:

Technical Advice & New Technologies:

Unganisha tested a search engine system, HTdig, on the list of links to post-production sites and provide advice as to how to gather and manage the list of sites.

International Model Forest Network Secretariat (IMFNS)

International Model Forest Network Secretariat (IMFNS), IDRC Project: 002737, Fred Johnson.

Web site management: Pauline Dole (interviewed Kafui Dansou)

Web site, connectivity and comments:

- <http://www.idrc.ca/imfn/index.html>

- The site is currently in English only but one of the priorities is to translate the complete site into french. The site was updated fall of 1997. There are plans to add more full text documents-- currently only the Annual Report and 1 workshop paper are available. They are discussing the possibility of starting some closed mailing lists on specific topics. The site includes "Criteria for the Establishment of a Model Forest Project" and "General process for establishing a model forest project".

- They are investigating the possibility of adding a database or distributed search system for capturing Lessons Learned from the model forests

One page description excerpt (w:\programs\secretar\1pg-desc.all):

"IMFN aims to foster cooperation and collaboration in the advancement of management, conservation and sustainable development of forest resources, through a world-wide network of working model forests."

Unganisha assistance:

Technical Advice & Subsidies for Internet/Email Access:

IMFNS has requested advise and possibly assistance for Lessons Learned database and for establishing private mailing lists.

International Network For Bamboo And Rattan (INBAR)

International Network for Bamboo and Rattan (INBAR) Phase II, IDRC Project: 045027, Cherla Sastry.

Web site management:

Web site:

- <http://www.idrc.org.sg/inbar/>

There is a basic web site on the IDRC Singapore server. The goal is to connect all (11-12) institutes into a global network--headquarters in China and to create INBARIS, the INBAR Information System.

Unganisha assistance:

Technical Advice and Training:

Technical advice will be provided by Unganisha. INBAR has funding already to set up its proposed network. Unganisha training materials are being provided to INBAR.

Micronutrients Initiative (MI):

Micronutrients Secretariat, IDRC Project: 910313, Venkatesh Mannar.

Web site management: Mahshid Lotfi

Web site, connectivity and comments:

- <http://www.idrc.ca/mi/>

- MI established a web site early but it has not been actively maintained recently. There are several databases that they would like to make accessible on their site; e.g., the Resource Centre catalogue (currently in Procite) and some technical databases (currently a text version of a FoxPro database is available). They would like to improve coordination and sharing of information within MI, with IDRC and with other related institutes. There are several full text documents on their site. In the future, the emphasis will be on making available documents such as reviews or progress reports

- MI will be hiring a Communication Director, an Information Manager and a Research Manager. The Research Manager will be responsible for the technical databases while the Information Manager will be responsible for the general web site and for the Resource Centre catalogue.

- MI is currently funding a listserv managed by International Nutritional Anemia Consultative Group (INACG)

Unganisha assistance:

Technical Advice:

Unganisha advice related to remote email access has been provided.

Mining Policy Research Initiative (MPRI)

Mining Policy Research Initiative (Latin America), IDRC Project: 050317, Réal Lavergne.

Web site management: Zsafia Orosz

Web site, connectivity and comments:

- <http://www.idrc.ca/mpri/initiative.html>

- An overview of MPRI is provided along with the Secretariat Proposal, project descriptions and a newsletter. There are plans to list links to reference material, dictionaries, databases, directories, conferences, journals and magazines, newsgroup, full text documents and country specific materials.

Project web sites and connectivity activities:

- Economic Research Consortium - Phase II, IDRC Project: 00313. The Economic Research Consortium (Consortio de Investigación Económica) site includes activities, programs, publications and member institutions. <http://www.consortio.org/>

Proposal excerpt:

"The use of electronic communications and data bases will also be emphasized. Connectivity tools, a Web-site, an electronic bulletin and the development of a mining database are already under way."

Office for Central and Eastern Europe Initiatives (OCEEI)

Environmental Management Development in Ukraine, Phase II, IDRC Project: 003695, Jean Guilmette.

Web site management: Zsofia Orosz

Web site, connectivity and comments:

- <http://www.idrc.ca/oceei/index.html>

- The OCEEI site emphasizes the expertise of the OCEEI staff and program activities. There are no listservs.

- In Eastern Europe, communication costs are high and there are telephone problems. Even though researchers have email, they are not interesting in using web-to-email gateways. They would rather request information from here by email and receive it as email attachments.

Excerpt from: "Confidence, connectivity, standards & networking: The role of scientific research in economic growth." An address by Jean-H. Guilmette Director of the Office for Central and Eastern Initiatives International Development Research Centre. At the occasion of the EMDU End of Project Conference Kiev, June 23, 1997
(<http://www.idrc.ca/oceei/standards.html>)

"Connectivity" is the mother-lode from which confidence is mined; without connectivity, ideas cannot circulate and do their important job as leavening agents.- connectivity, defined as the free flow of ideas and of goods, however it takes place, is both the result of increased confidence and its driving force; - "population mobility is a key ingredient of connectivity: mobility alone does not suffice to explain development, but no development ever took place without the support of human mobility" (4).

Its importance: What good is confidence if there is no infrastructure for ideas to move about and

to reach users. Ideas are imbedded in material products, in cultural artifacts, in books, they travel with television programs and, increasingly they are conveyed on electronic networks such as the World Wide Web. Thus, in many ways, the circulation of ideas is intimately connected to trade. Trade among nations does more than give the direct benefits of products to buyers and consumers: new ideas spring from new products just like mushrooms spring after heavy rain. Strong trading nations tend to have strong economies irrespective of their natural resource base: the Netherlands, Japan and Singapore are good examples of prosperous yet poorly endowed countries, while the USA, Canada, and Australia show that resource rich countries which trade most freely, are also more likely to experience long term sustained growth.

People transport their knowledge whenever and wherever they go. Thus all manners of transporting people and knowledge (communication infrastructures) contribute to the sharing of wealth and its enlargement. If communication infrastructures are easy to use and low in cost, they will potentially create more wealth.

The history of scientific discoveries abounds with stories about significant discoveries which were fortuitous and accidental. It's only when the proper connections were made, either to a specific pent-up market demand or to another scientific or technologic advance that mankind was able to draw the full benefit of those innovations. James Burke (5) has demonstrated after years of well-documented research how discontinuous and nonlinear is scientific progress. He shows, through a vast array of examples, how one discovery is linked to another, almost always, following unexpected paths."

"A network is an arrangement of interconnected people or operations. There can be many types of networks, including informal ones, such as we find among scientists - in any highly specialized domain, there will be few researchers who know each other, get together regularly at international symposia, and are used to exchanging views, ideas, and even their discoveries. There is no one officially in charge of making such a network operate. It runs by itself, in a sense, and its cost is small. It can be argued that, relative to its cost, it is a most efficient model: it can lead to infinitely great advantages, pecuniary and otherwise, while its operating costs are next to nothing. On the other hand, there are formal networks, with imposing structures and widely respected identities, comprising a core of officials serving both the institution and the network. The OECD and INTERPOL are two prime examples. A third category can also be identified, that may be more rare but no less effective: it blends informality within a structured arrangement: the World Banks annual consortia meetings would fit this description.

There lies a whole gamut of network possibilities, ranging from informal but structured to more formal but less structured networks. During the eighties, networking became a feature of the communications industry. At first computer networks were merely the instruments of an existing network of individuals; however, the emergence of Internet and of the World Wide Web has witnessed the birth of a new entity, literally a world community, an immense network of unsurpassed might where hundreds of millions of individuals, companies and institutions freely exchange information. Many experts have heralded this as the beginning of a new revolution, technological and social."

Strategy for International Fisheries Research (SIFR)

SIFR (Strategy for International Fisheries Research) Global, IDRC Project: 920006, Brian Davy.

Web site management: Brian Davy

Web site, connectivity and comments:

- <http://www.idrc.ca/sifr/>

- This is a basic site with lists of SIFR Projects, Bulletins and Publications. All or part of the site will be moved to the new office in Rome. A list of links to fisheries, aquaculture and oceans was compiled by SIFR and resides on the To the World site.

Vietnam Economic and Environmental Management (VEEM)

There are plans to develop a web site for VEEM at the Institute of Economics, Vietnam.

Unganisha assistance:

Subsidies for Internet/Email Access and Training:

Vietnam Economic and Environmental Management (VEEM), IDRC Project: 003099, Marie-Claude Martin/Stephen Tyler. Unganisha assistance being provided to establish reliable email and training.

Subsidies for Internet/Email Access and Training:

Viet Nam / Indochina / Mekong Sustainable Economic Development Program (VIMSED), IDRC Project: 920011, Marie-Claude Martin. Unganisha assistance being provided to establish reliable email and training.

Corporate Services Branch

Evaluation Unit (EU)

Web site management: Cerstin Sander

Web site, connectivity and comments:

- <http://www.idrc.ca/evaluation/>

- This site should be operational soon. There will be minimal information about EU with highlights, a list of publications (some full text), the Annual Corporate Evaluation (ACE) report and information about the consulting work that EU offers. The main purpose of the site will be to exchange information with colleagues.

- Several full text documents were included as part of the RIMS digitization project and the results were not good. Currently Sandra Garland has been contracted to revise the electronic version of the documents. The Annual Centre Evaluation (ACE) report is being formatted by Sandra Garland, paid for by the Publication Unit as it is a corporate document.

- The Evaluation Information System (EVIS) is being moved into a Paradox database. There are no plans at this time to make it web accessible.

- The Evaluation Reports are currently being tested in the Reports depot.
- PCRs capture some of the evaluation information (lessons learned) but only for projects greater than \$100,000. There is a lot of resistance to doing PCRs especially for old and orphan projects. A laptop version of PCR software will be available soon.
- Would be interested in tracking whether or not evaluations are being planned through trip reports but there is some resistance to making all trip reports available to all staff.
- Project Final Reports are potentially an important source of evaluation information.

Project web sites and connectivity activities:

- Dissemination and Communication of Evaluation, IDRC Project: 003750. From IDRIS: "...developing an evaluation Web page; and digitizing relevant documents for the Web site."

from the **1997 Annual Corporate Evaluation (ACE) Report** (w:\csbdgsi\eval\ace-97\ace-eng):

"Research Outcomes...68% of the reports record the establishment of effective networks or linkages among researchers, institutions, NGOs, and/or government agencies....

Right Stakeholders . Impact is greatly enhanced when the right stakeholders are involved in the project; evaluations call for the use of more participatory techniques, or for greater coordination and networking with key research users and collaborators during the design and implementation of the research. (25%)

Dissemination . Projects need, yet often lack, a coherent, appropriate and aggressive strategy to disseminate research findings to users. (23%)"

"Research Linkages

Three out of four of the reports (72%) deal with either formal networks or looser arrangements among researchers, institutions, knowledge users, etc. The issues they raise are mainly in the areas of knowledge dissemination and how to make networks effective.

Knowledge Dissemination . The reports raise two key issues regarding knowledge dissemination, one of the primary benefits of research linkages:

1. ***Finding the appropriate mode of dissemination is essential and generally different modes are required to reach the various parties concerned.*** For example, the evaluation of a cattle project in Mexico and Central America found that information sharing occurred only at a scientific level through publications, seminars and symposiums; little was returned to the local producers. Extending access to research results beyond the research community is an essential, but difficult, process.

2. ***In some contexts, traditional means of knowledge diffusion should not be replaced with new information and communication technologies (ICTs).*** An institutional assessment of CODESRIA, a pan-African institute devoted to developing African social science, found that its traditional role as publisher and documentation centre remains vital to researchers because of a dearth of private publishers and limited access to electronic information resources. In this context, ICTs might be less appropriate, given the audience's limited ability to receive information through these new technologies.

Networks . The evaluations provide some guidance on how to build effective networks. The evaluations confirm a recent study's conclusions regarding the key factors that affect the success or failure of a network; these include: flexible and internally-driven management, diversity of membership, clear and focussed goals, and the ability to adapt to changing circumstances (*IDRC Networks: An Ethnographic Perspective*, Anne Bernard, 1996). Evaluators emphasize that networks need to be structured and actively promoted, they require long-term program support, a committed coordinator, and they demand an appropriate and reliable communication system."

"EVIS data on Research Linkages"

Evaluation Information System (EVIS) data also reveal positive assessments of IDRC's record in promoting research linkages. Of the 192 reports and sub-reports on EVIS, 127 answered the question, "*Were linkages among national, regional, and/or international researchers enhanced?*" Their conclusions were:

Yes: 67 reports (53%)
No: 23 reports(18%)
Yes/No: 37 reports (29%)*

Only 69 reports addressed the question "*Were linkages between researchers and facilitating or intermediary organizations adequate?*" 70% of the responses were positive:

Yes: 47 (70%)
No: 12 (17%)
Yes/No: 10 (14%)*

* Yes/No denotes that the report cites examples where some linkages were enhanced (or adequate) and others were not."

Project web sites and connectivity activities:

- Assessing Progress Towards Sustainability, Project 003298, web site which includes "Methods and Tools for Assessing Sustainability", "Performance Assessment for Human and Ecosystem Wellbeing and Sustainable Development", and "Field Experiences: Colombia, Zimbabwe and India" (Don Peden, Fred Carden)

Partnership and Business Development Office (PBDO)

Web site management: Neale MacMillan

Web site, connectivity and comments:

- <http://www.idrc.ca/business/>

- The site, with project descriptions, was originally established by Publications. Currently, the site is quite static with few external links. Very few messages are sent to the generic email (bdo@idrc.ca). The site is a low priority for PBDO so very little time is spent on it. There are no mailing lists.

- PBDO is not helping any of the PIs with their web sites. The PI web site managers are

managing the sites themselves.

- The site is potentially a useful communication tool PBDO. There may be a need to increase PBDO management awareness of the potential of the site.

Public Affairs / Media Unit

Web site management: (interviewed Michael Boulet)

Web site, connectivity and comments:

- <http://www.idrc.ca/media/>

- Public Affairs plans to hire someone to completely redesign their site. It will include a section for Leads and press releases and a section for links to media sites (tradition news sites and NGO sites).
- Mike has been spending about 20% of his time managing the web site.
- The method of receiving and distributing the daily news is being reviewed (may use DFAIT system).

Research Information Management Services (RIMS)

1. Publications

Web site management: Robert Charbonneau, John Stevenson

Web site, connectivity and comments:

- <http://www.idrc.ca/books/>, <http://www.idrc.ca/reports/>, <http://www.idrc.ca/nayudamma/>
 - The Publications Unit manages webs sites for IDRC Books, Reports magazine and a research summary section called "Nayudamma".
 - The manager of the Publications Unit chairs IDRC's Internet Working Group (IWG). The IWG manages the IDRC corporate site.
- John and Rebekah (freelance) do much of the formatting.

- There are plans to create:

1. a mailing list of 10-15,000 names to be maintained in an Access database. This is a list of subscribers to Reports magazine. A cold fusion web interface is being developed so that names can be added by public. It will be searchable on the intranet. In conjunction with AUCC, there are plans to add a registry for Canadians by form. Publications is interested in assisting in the development of a corporate-wide address book that would be a centralized Rolodex but with individual sections.
2. a directory of staff email addresses in an Access database.
3. a database of IDRC Books in Access. There will be strong links with IISD and North South Institute book catalogues.
4. a Calendar with both internal (intranet) and external (Internet) views; i.e, public events and IDRC internal events.

- Publications Unit has transformed the weekly "IDRC Reports" into a more dynamic system, "Reports". The goal of the new format is for it to become a network of researchers in developing

countries. A form is being developed for the public to input ideas to Reports. This form would be used by IDRC staff and project recipients also. Reports will not just consist of new articles, it will also contain abstracts of articles published elsewhere and a pointer to the article if it exists on the Internet.

- "Echonet", an electronic version of "Echogramme" is being created for the IDRC intranet. There will be an input form (like Reports) and there will be an overlap of articles with Reports; i.e., there may be pointers to new articles in Reports and some internal information will appear in Reports.

- Electronic mailing list management will be changed by the introduction of Streetalk for NT. Users will not need a separate username and password for each discussion list they belong to on the IDRC system.

Project web sites and connectivity activities:

- Mise à jour du serveur web, IDRC Project: 003262. From IDRIS: "Cette activité de soutien à la recherche vise à couvrir les frais relatifs à la rédaction, à la révision, à la traduction, à l'illustration mais surtout au formatage pour le site Web de pages Électroniques sous la responsabilité directe ou indirecte des Éditions du CRDI. L'objectif d'ensemble est de maintenir à jour l'information sur le CRDI et de s'assurer que l'image du Centre est maintenue et que la qualité de l'information répond aux standards d'excellence de l'institution."

Unganisha assistance:

New Technologies:

The Publication Unit is collaborating with Unganisha on the development of IDRC intranet site.

2. Library

Web site management: Marjorie Whalen

Web site, connectivity and comments:

- <http://www.idrc.ca/library/>

Web site:

- RIMS maintains 2 databases, BIBLIO and IDRIS, both of which have telnet access and web-based interfaces. Many full text archive documents have been digitized and made available on the web site (Digital Library). Currently, the web site maintenance and the creation and maintenance of the web-based interface to BIBLIO and IDRIS are contracted out. There is a biography for the director only. Future plans include developing a web-based interface for the IMAGES database and expansion of the Digital Library. RIMS staff are active members of IDRC's Internet Working Group.

Electronic Documents Management System (EDMS):

- RIMS is managing the development of an EDMS for IDRC. All email, with attachments, can be captured by EDMS and there is a correspondence tracking module. Non-IDRC staff (project recipients) and ROs can be given access through the firewall. Workspaces can be defined for

specified groups within the workspace. The system allows for tracking who changes what, searching and notification when new documents added to the workspace. ROs (and non-IDRC staff) will access via an Internet interface.

Special Initiatives Program (SIP)

Web site management: Rita Bowry, Estelle Laferriere

Web site, connectivity and comments:

- <http://www.idrc.ca/awards/>
- The Centre Training and Awards (CTA) site has comprehensive list of grants and application procedures. There is no SIP web site other than the CTA site.
- This site was initially created by a summer student 2 years ago. Last year, Ian Cooke, a consultant (recommended by Publications) updated the site and applied the IDRC template. Currently the application forms are in .pdf format and many users are having problems using them. They are investigating different types of forms. They are in the process of hiring someone to update some of the content of the site, specifically the awardee profiles. Some profiles are also housed on the media site
- The possibility of having pointers to official outputs of the awards or of obtaining an electronic version of theses along with the paper copy was discussed. In the case of masters and doctoral awards, this would probably be the theses.
- The structure of this site will probably stay the same in the near future however the content needs to be revised quite frequently. It would be useful to have more than one SIP staff person able to update the site.

Project web sites and connectivity activities:

- Corporate Citizenship Grants 1997-98, IDRC Project: 003490; e.g., (1) The site, "African media in the face of democratic transition, 24-25 April, 1997" includes an electronic forum. http://www.vuesdafrique.org/colloque/colloque_eng.html; (2) The site, "In Common: Multi-sector Directory of BC Global Organizations and Resources", includes a comprehensive directory organized under several different headings. <http://place2b.org/bccicweb/incommon/index.htm>; and (3) The site, "Sustainability Issues Forum at the APEC People's Summit", includes forum and workshop summaries, a bibliography and a photo gallery. <http://place2b.org/bccicweb/sifweb/index.html>
- Connecting to the World Partnership Grants: 1997-98, IDRC Project: 003613; e.g., (1) Canadian Centre for International Studies and Cooperation (CECI). A web site was developed. <http://www.ceci.ca/ceci/info/eng/index.htm>; (2) The site for the "Global Change Game" includes a tour schedule and information about hosting and participating in the game. <http://www.mbnet.mb.ca/lucas/gcg/index.html>; and (3) United Nations Association in Canada (UNAC), IDRC Project: 003613. A web site was developed which includes a current events calendar, full text newsletter and links to related sites. "<http://www.unac.org/>
- CASID/CJDS Partnership Grant: 1996/99, IDRC Project: 002973. The Canadian Association for the Study of International Development (CASID) was developed to explore the use of electronic communications. <http://www.casid-acedi.ca/fronteng.html>

- Fempress: Internetting Women's Press in Latin America, IDRC Project: 003443. The web site, "fempress: Red de Comunicación Alternativa de la mujer", was developed as part of the project and includes a full text journal and a searchable database of articles. <http://www.fempress.cl/>
- New Generation of Development Scholars and Practitioners: Phase III, IDRC Project: 003287. From IDRIS: "...The specific objectives are to provide field experience in a Canadian context for students for credit; introduce students and faculty to the use of the World Wide Web (WWW) and its applications; examine the issues surrounding information technologies for development; and develop self-sustainable and flexible mechanisms for student and instructor communication and resource production."; e.g., International Development Studies Network (IDSNET). This site was developed to encourage networking among international development studies programs in Canada. It includes an electronic discussion group, full text documents, lists of links, student and faculty contacts, news and an electronic essay contest. The discussion group is not very active. <http://www.idsnet.org/>
- Canadian Partnerships on Global and Emerging Issues: 1997-98, IDRC Project: 003530; e.g., The site for "A Forum on International Financial Institutions in the 21st Century, October 17 and 18, 1997, University of Alberta, Edmonton", includes conference information. <http://admin1.intlcent.ualberta.ca/ForumIFI/>
- CIDA/Refugee Working Group, IDRC Project: 920801. This project produced the Palestinian Refugee ResearchNet site which includes many full text documents, links to related sites, mailing lists and news. <http://www.arts.mcgill.ca/mepp/prrn/prfront.html>
- Canada-Latin America Research Links (AUCC), IDRC Project: 002624. The Association of Universities and Colleges of Canada site, "Research Cooperation Programme between Canada and Latin America", includes grant application procedures and descriptions. <http://www.aucc.ca/english/international/program/indexe.htm>
- Canadian Sabbatical to Africa - AUCC, IDRC Project: 003456. The "Sabbatical Grants for Africa" site includes grant application procedures and descriptions. <http://www.aucc.ca/english/international/program/africa.htm>
- Corporate Citizenship Grants 1996-97, IDRC Project: 003055; e.g., The site, "Vglobe Teaching Globally for a Sustainable Future", includes Global Issues Resource Index of a variety of activities to enrich the global classroom and links to related sites. <http://www.islandnet.com/vglobe/>
- World Commission on Forests for Sustainable Development: Report on North American Public Hearings, IDRC Project: 003481. The site includes highlights of the report. <http://iisd1.iisd.ca/wcfsd/winnipeg.htm>
- WUSC- IDRC Student Exchange for Enhanced Knowledge (SEEK): A Proposal, IDRC Project: 003426. This World University Service of Canada site includes grant application procedures and descriptions. <http://www.wusc.ca/campus/campus.html#SEEK>
- CGIAR National Support Organization in Canada, IDRC Project: 003470. From IDRIS: "...communicating the results of these activities to interested Canadian scientists via a newsletter and the Internet."

Uganisha assistance:

Subsidies for Internet/Email Access:

Science, Religion and Development, IDRC Project: 003309, Kathleen Clancy. Uganisha has

provided funding for email for one of the researchers.

Regional Offices

ASRO and ROSA host their own web sites. LACRO and WARO have developed sites that are hosted on the IDRC server in Ottawa. EARO is in the process of developing a site. Publications has assisted all the regional offices with the development of their sites which are modelled closely on the IDRC corporate site.

Appendix 2: Uganisha assistance

The Uganisha project provides subsidies, technical advice and support, training assistance and technology reviews to IDRC project recipients. It also assists IDRC Program staff with connectivity activities. As well as providing assistance to specific projects, Uganisha is establishing Help Desks in countries in Africa and Asia to assist projects located in those areas.

Programs Branch

ASPR:

Subsidies for Internet/Email Access:

Social Policy Research and Practice in Eastern and Southern Africa, IDRC Project: 000288, Denise Deby. Uganisha is providing email access for several members of the ASPR-supported regional Social Policy program.

Subsidies for Internet/Email Access and Technical Advice:

Youth - Complementary Activities, IDRC Project: 003433, Jamie Schnurr. A new news group on the Internet was created called sci.sociology.youth.livelihoods with assistance from Uganisha. Uganisha is providing email access for several researchers in Zambia

Subsidies for Internet/Email Access:

RPS-AOC: Réseau de recherche en politiques sociales pour l'Afrique de l'Ouest et du Centre, IDRC Project: 000848, Jean-Michel Labatut. Uganisha is providing email access and full Internet access for several researchers.

Subsidies for Internet/Email Access:

Canadian-Developing Country Program on Social Development Research, IDRC Project: 002874, Martha Melesse. Uganisha is assisting in the establishment of a Pan-African electronic discussion group on "poverty alleviation strategies and their impact/effectiveness", a joint ASPR/Canadian Consortium for International Social Development (CCISD) pilot project.

CFP:

Technical advice:

Workshop on the Contribution of Urban Agriculture to Food Security in West African Cities (June 15-18/1998), IDRC Project: 004080, Ola Smith. Uganisha is assisting in the development of a connectivity plan.

Subsidies for Internet/Email Access:

Latin American Urban Agriculture Research Network (AGUILA), IDRC Project 000921, Luc Mougeot. Uganisha connectivity assistance has been requested for about 20 of the 50 members of the AGUILA network.

CBNRM:

Subsidies for Internet/Email Access:

Sustainable Land Use Options for Shifting Cultivation (Nagaland), IDRC Project: 001772, John Graham. Connectivity support, possibly using a wireless solution, for remote Indian research project was requested.

Subsidies for Internet/Email Access:

Community Based Upland Resource Management (Viet Nam), IDRC Project: 938008, John Graham. Unganisha assistance being provided to establish reliable email and training.

Subsidies for Internet/Email Access:

CBRM: Farming Systems (Vietnam), Phase II, IDRC Project: 040247, John Graham. Unganisha assistance is being provided to establish reliable email and training.

Subsidies for Internet/Email Access:

Community-Based Mangrove Management (Cambodia), IDRC Project: 040401, Brian Davy. Unganisha assistance being provided to establish reliable email and training.

Subsidies for Internet/Email Access:

Vietnam's Forest Challenge (Phase II), IDRC Project: 040384, Stephen Tyler. Unganisha assistance is being provided to establish reliable email (through TMA Co.).

Subsidies for Internet/Email Access:

Local Strategies for Water Supply and Conservation Management (India, Nepal), IDRC Project: 001675, David Brookes. Unganisha is assisting with connectivity (through ICIMOD).

EcoHealth:

Training:

Environmental Health Impact Assessment in the Amazon (Phase II), IDRC Project: 050239, Gilles Forget. Unganisha provided a subsidy to hire a Cuban trainer to provide email and Internet training.

Training:

Integrated approaches to safe drinking water (global), IDRC Project: 003329, Gilles Forget. Unganisha supported the travel of a consultant to Buenos Aires on behalf of the Water Toxicity project.

Technical Advice:

Integrated approaches to safe drinking water (global), IDRC Project: 003329, Gilles Forget. Unganisha is providing advice for a proposed SchoolNet module.

Subsidies for Internet/Email Access:

Watertox Users Panel, IDRC Project: 050280, Roberto Bazzani. Assistance with a mailing list to

link the institutions has been requested.

Subsidies for Internet/Email Access:

Research Network in Health Systems and Health Policies for Central America and the Dominican Republic, IDRC Project: 002851 and Health Systems in the Southern Cone of Latin America, IDRC Project: 000403, Roberto Bazzani. Uganisha assistance has been requested for a web site.

Subsidies for Internet/Email Access:

Promoting Sexual Health (Uganda) II, IDRC Project: 003018, Bertha Mo. Connectivity support has been provided for a researcher.

Subsidies for Internet/Email Access:

Survey on Working Conditions and Health Impact in the Construction Materials Industry (Vietnam); IDRC Project: 003017, Jean Lebel. Uganisha assistance being provided (through TMA Co.) to establish reliable email and training.

LCA:

Subsidies for Internet/Email Access:

Réseau ouest et centre africain de recherches en Éducation (ROCARE) / Education Research Network for West and Central Africa (ERNWACA), Phase III, IDRC Project: 065231, Sibry Tapsoba. Uganisha provided email access for several researchers and full Internet access for several researchers.

Subsidies for Internet/Email Access:

Educational Research Network for Eastern and Southern Africa (ERNESA), Phase III, IDRC Project: 001229, Kabiru Kinyanjui. Uganisha is investigating providing connectivity assistance.

Subsidies for Internet/Email Access:

Environmental Learning in Communities and Schools in Eastern and Southern Africa (ELP), IDRC Project: 055264, Kabiru Kinyanjui. Uganisha provided email or full Internet for several researchers.

MIMAP:

Subsidies for Internet/Email Access:

Macroeconomic Adjustment Policies, Health Sector Reform and Access to, Utilization and Quality of Health Care (MapHealth), IDRC Project: 002307, Enis Baris. Uganisha assisted in establishing a mailing list and provided copies of Workplace to Workspace book.

Subsidies for Internet/Email Access:

MIMAP - Benin, Burkina Faso, IDRC Project: 003238, Marie-Claude Martin. Uganisha provided connectivity subsidies to several researchers.

Subsidies for Internet/Email Access:

MIMAP - Nepal Phase II, IDRC Project: 003393, Rohinton Medhora. Unganisha is assisting with connectivity (through ICIMOD).

PAN:

Subsidies for Internet/Email Access:

PAN - Vietnam National Intranet, IDRC Project: 040342, Renald Lafond. Unganisha assistance being provided (through TMS Co.) to establish reliable email and training.

Technical advice:

A Network for Research on Software Tools for Land Management (HUMUS Network), IDRC Project: 003865, Zbigniew Mikolajuk.

Unganisha assisted the HUMUS network to develop a project proposal using the Internet; to establish a web site on an IDRC server and with a mailing list humus-cl.

<http://unganisha.idrc.ca/humus/>

PLAW:

Publication:

Electronic Conference on Livestock Environment Interactions - GLOBAL, IDRC Project: 003269, Don Peden. A publication, "Guidelines For Organizing An Electronic Conference: Lessons From The Global Consultation on Balancing Livestock, Environment, and Human Needs" which involved more than 1,000 participants, documents the methods used and the lessons learned.

SUB:

Technical Advice:

The Crucible Project: Alternative Legislation on Intellectual Property Rights II (Global), IDRC Project 004015, Chusa Gines/Michael Halewood. A very private mailing list is being established with guidelines for use; a facilitator; and a temporary web site for document sharing prior to a conference.

Subsidies for Internet/Email Access:

Participatory Plant Breeding in High Altitude Villages of Nepal, IDRC Project: 003094, Daniel Buckles. Unganisha is assisting with connectivity (through ICIMOD).

TEC:

Subsidies for Internet/Email Access:

Finance and Changing Trade Patterns in Developing Countries, IDRC Project: 003252, Rohinton Medhora. Unganisha is assisting with an upgrade to their LAN and with connectivity.

Subsidies for Internet/Email Access:

Leading Issues in International Trade Relations - Latin America, IDRC Project: 003392, Rohinton Medhora. Uganisha is assisting with connectivity.

Subsidies for Internet/Email Access:

Secretariat for Institutional Support for Economic Research in Africa (SISERA), IDRC Project: 065077, Réal Lavergne. Uganisha is investigating Internet access via the LANs for several member institutes.

MISC:

Subsidies for Internet/Email Access:

Corneal Infections (Nepal) III, IDRC Project: 001214, Enis Baris. Uganisha is assisting with connectivity at Tribhuvan University (through ICIMOD).

Secretariats

ATPS:

Subsidies for Internet/Email Access:

Uganisha assistance provided to several researchers; e.g., telephone lines, ISP subscriptions, modem, training and computer upgrades.

Bellanet:

Publications & New Technologies:

- Bellanet and Uganisha have worked collaboratively on several projects: (1) the book "From Workplace to Workspace", (2) web-to-email gateway, (3) an Extensible Markup Language (XML) system for the development community, (4) a web-to-email gateway, and (4) cold fusion interface to databases.

EHIP:

Technical Advice:

Uganisha staff sourced and chose computer technology (e.g., 2nd hand laptops) and assisted with obtaining a solar power source for EHIP staff in Tanzania.

Foodlinks:

Technical Advice & New Technologies:

Uganisha tested a search engine system, HTdig, on the list of links to post-production sites and provide advice as to how to gather and manage the list of sites.

IMFNS:

Technical Advice & Subsidies for Internet/Email Access:

IMFNS has requested advice and possibly assistance for Lessons Learned database and for establishing private mailing lists.

INBAR:

Technical Advice and Training:

Technical advice will be provided by Unganisha. INBAR has funding already to set up its proposed network. Unganisha training materials are being provided to INBAR.

MI:

Technical Advice:

Unganisha advice related to remote email access has been provided.

VEEM:

Subsidies for Internet/Email Access and Training:

Vietnam Economic and Environmental Management (VEEM), IDRC Project: 003099, Marie-Claude Martin/Stephen Tyler. Unganisha assistance being provided to establish reliable email and training.

Subsidies for Internet/Email Access and Training:

Viet Nam / Indochina / Mekong Sustainable Economic Development Program (VIMSED), IDRC Project: 920011, Marie-Claude Martin. Unganisha assistance being provided to establish reliable email and training.

Corporate Services Branch

RIMS:

New Technologies:

The Publication Unit is collaborating with Unganisha on the development of IDRC intranet site.

SIP:

Subsidies for Internet/Email Access:

Science, Religion and Development, IDRC Project: 003309, Kathleen Clancy. Unganisha has provided funding for email for one of the researchers.

Appendix 3: Connectivity activities of IDRC projects

Projects with connectivity components--Programs Branch:

- ACACIA: Connectivity, Southern Africa, 002858, a precursor to the Acacia project, web site includes Final Report
- ACACIA? (Info & Comm Theme): Global Knowledge '97 conference, IDRC project: 003476, this project included support to the Association for Progressive Communications (APC), Web Networks of Toronto, who published a background document, established several public mailing lists--some more popular than others (the lessons learned list had only 2 serious submissions, the GKD list is still running and the gender list was very active)
- ACACIA: Introduction of ICTs in Secondary Schools (Mozambique), IDRC Project: 004101. From IDRIS: "...Computers and communication facilities will be installed in five secondary schools, three teacher training colleges and two technical institutes in Mozambique. One computer will be installed in the library of each school, to encourage information sharing and communication between students and teachers. Another 10 will be installed in computer laboratories, to support both computer literacy training and the integration of computing into other subjects..."
- ACACIA: Information and Communications Policy - Mozambique, IDRC Project: 003796. From IDRIS: "...The expected output will be a state policy on information and communication technologies based on extensive consultation between the Government of Mozambique, the telecommunications sector and the public at large."
- ACACIA: Multipurpose Community Telecentre Pilot Project (Uganda), IDRC Project: 003225. From IDRIS: "...The MCT will be equipped with telephone, fax, Internet e-mail and World Wide Web access, along with video, audio and documentation production facilities..."
- ACACIA: South African Telecentre Development Project, IDRC Project: 003795. From IDRIS: "...Adopting these telecentres will help test new technologies and applications, innovative policies and tariff structures, and new approaches to organizing telematics services..."
- ACACIA: Intégration de la dimension genre dans la stratégie ACACIA - ACACIA: Sénégal, IDRC Project: 065202. From IDRIS: "...étant donné l'accent mis par le Programme ACACIA sur les femmes et les jeunes pour la promotion de leur accès aux technologies de l'information et de la communication, il s'avère nécessaire de mieux prendre en compte les relations de genre dans la Stratégie qui a été définie pour le Sénégal, un des pays choisis pour tester les approches intégrées dans le cadre du programme ACACIA..."
- ACACIA: Role of ICTs in the Implementation of the Decentralization Policy in Senegal, IDRC Project: 065199. From IDRIS: "...The purpose of this project is to explore possibilities offered by ICTs to operationalize further the decentralization so that locally elected people may assume their responsibilities effectively..."
- ACACIA: Msunduzi Community Network (South Africa), IDRC Project: 003981. From IDRIS: "...This project aims to improve community-level decision-making by improving communication and information management on environment and development issues... Eight hubs will be set up based in a variety of community organizations spread throughout the region,

with a local environmental group at the centre. Representatives from each hub will be given the required training. It is expected that this will result in a model of how to involve semi-literate communities in decision-making processes through the use of information and communication technologies (ICTs)."

- ACACIA: Pilot Telecentres Monitoring, Impact Assessment and Learning System, South Africa, IDRC Project: 003797. From IDRIS: "The Universal Service Agency (USA)... is embarking upon an ambitious program to pilot test approximately 80 telecentres, the first of several hundred envisaged over the next two to three years nationwide..."

- ACACIA: Mozambique Acacia Advisory Committee Secretariat, IDRC Project: 003752. From IDRIS: "...This project will establish a Secretariat in the Office of the Vice Rector to support the Mozambique Acacia Advisory Committee (MAAC) and facilitate the implementation of the Acacia National Strategy in the country. The Secretariat will have three broad areas of responsibility: stimulating public awareness of ICTs and development issues; assisting in the identification of research and project development needs; and informing and servicing the MAAC..."

- ACACIA: Empowering People's Organisations with Internet Access, IDRC Project: 003729. From IDRIS: "...In this project, AIDC [Alternative Information Development Centre] will help build the capacity of primary role players in civil society such as community-based organizations (CBOs), non-governmental organizations (NGOs), local trade unions, civic organisations, etc., to take advantage of ITCs. The project will focus primarily on organizations associated with black women and youth. A comprehensive range of services is envisaged to enable them to use ICTs such as the Internet as a tool to enhance their community-based work."

- ACACIA: Establishing Two Pilot Telecentres in Mozambique: Feasibility Study, IDRC Project: 003728. From IDRIS: "...It is expected that the methodology will contribute to knowledge on how best to introduce telecentres and find more general application in and beyond Mozambique."

- ACACIA: Experimentation of information technologies in Western African centres for reading and cultural animation, IDRC Project: 003702. From IDRIS: "...Deliverables are case studies dealing with experimentation of information technologies at the community level. These studies will be produced and disseminated on the Internet through the IDRC and the Agence de la francophonie Web sites, and also in print to potential users and donors..."

- ACACIA: ICTs for Tourism-driven Local Economic Development Workshop, IDRC Project: 004044. From IDRIS: "The Council for Scientific and Industrial Research (CSIR), South Africa, is working with IDRC on a project proposal to develop specific information and communication technologies (ICTs) to support tourism industry development... The workshop is expected to focus on the following areas: community access to connectivity (e-mail and full internet access) and related training and technical assistance; ICT support for business service providers and related training and technical assistance; development of tourist industry software; and electronic marketing, promotion and booking..."

- ACACIA: Consultation on Regional School Networking, IDRC Project: 003993. From IDRIS: "Two delegates from each of six countries have been invited to attend a school networking conference in Cape Town. The countries are Angola, Botswana, Lesotho, Mozambique, Swaziland and Zambia... A meeting will be held on 25 September 1997 to allow the delegates to explore the possibility of working towards a school network in the region..."

- ACACIA: Women's Net Information Strategy Team Workshop, IDRC Project: 003944. From

IDRIS: "...Some of the topics to be tackled during the workshop will be the framework for the Women's Net site; information management systems for the site; ways of assuring long-term sustainability of the site; capacity-building in website development; and sharing the experience with other African countries."

- ACACIA: Broadcasting Policy Process, IDRC Project: 003800. From IDRIS: "...The government is embarking on a reform of broadcasting policy that includes a review of the linkages between broadcasting and ICT policy; synergies between broadcasting and the Internet; the roles of public, private and community broadcasters; the convergence of broadcasting, telecommunications and information technologies; and the role of broadcasting in delivering universal access to the information society..."

- ACACIA: SA Government Internet Policy, IDRC Project: 003802. From IDRIS: "The broad objective of this activity is to advise to the Department of Communications of the Government of South Africa on a strategy to develop an Internet policy..."

- ACACIA: South Africa: Cybercity, IDRC Project: 003801. From IDRIS: "The broad objective of this activity is to help the Department of Communications of the Government of South Africa establish the feasibility of building a cybercity in South Africa..."

- ASPR: Council on Health Research for Development (COHRED), IDRC Project: 002853. The site includes basic information about COHRED and an executive summary of the interim assessment of Essential National Health Research (ENHR) and COHRED.
<http://www.cohred.ch/~cohred/>

- ASPR: Education, Equity and Economic Competitiveness in the Americas, Ph II, IDRC Project: 003130. The Partnership for Educational Revitalization in the Americas (PREAL) site includes the project description and some full text documents. <http://www.preal.cl/Index-i.htm>

- ASPR: Social Development Forum for the Americas, FORO is an umbrella site for ASPR activities in Latin America. The goal is to encourage the ASPR-supported networks to develop their own sites and communication systems. Until they have the capability, the sites are hosted by LACRO. <http://www.idrc.ca/lacro/foro/>

- ASPR: Monitoring and Evaluation of Poverty Alleviation Program (PERU), IDRC Project: 050256, site in Peru being developed and, when completed, will include statistics and databases. <http://www.up.edu.pe/poverty/>

- ASPR: Youth - Complementary Activities, IDRC Project: 003433. Uganisha assisted with the creation of a new newsgroup on the Internet called sci.sociology.youth.livelihoods and provided email access for several researchers in Zambia.

- ASPR: Youth - Complementary Activities, IDRC Project: 003433. ASPR has been very active in helping to create a web site for the project, Youth Livelihoods Knowledge Network. It will be launched in late spring. It includes a bibliography of best practices, an annotated bibliography and an annotated links section. <http://www.agora-group.com/youth/>

- ASPR: Education and Urban Labour Market in Mexico, IDRC Project: 920403. The site includes project descriptions, full text documents and resumé of researchers.
<http://www.crim.unam.mx/lib/>

- ASPR: Regional Research Program on Social Policy Assessment Phase II, IDRC Project: 050140. The site includes lists of projects, institutions and specialists.
<http://www.rau.edu.uy/polsored/index.html>

- ASPR: Implementing Integrated Local Social Policy in Bolivia, IDRC Project: 938762. The

site includes members and associated networks, papers, bulletins and links to other sites.

<http://www.netline.cl/riadel/>

- ASPR: Social Policy Research Network for West and Central Africa, Phase II, IDRC Project: 003930. ASPR developed a connectivity plan in conjunction with the network coordinator.

- ASPR: Decentralization and Social Policies, IDRC Project: 050176.

http://www.idrc.ca/lacro/foro/rr_dec.html. Organized, in collaboration with PAN, an electronic conference on health policy reform and decentralization. <http://www.netline.cl/riadel/eripap4.htm>

- ASPR: Social Policy Research and Practice in Eastern and Southern Africa, IDRC Project: 000288. Uganisha is providing email access for several members of the ASPR-supported regional Social Policy program.

- ASPR: RPS-AOC: Réseau de recherche en politiques sociales pour l'Afrique de l'Ouest et du Centre, IDRC Project: 000848. Uganisha is providing email access and full Internet access for several researchers.

- ASPR: Canadian-Developing Country Program on Social Development Research, IDRC Project: 002874. Uganisha is assisting in the establishment of a Pan-African electronic discussion group on "poverty alleviation strategies and their impact/effectiveness", a joint ASPR/Canadian Consortium for International Social Development (CCISD) pilot project.

- CFP: Latin American Urban Agriculture Research Network (AGUILA), IDRC Project 000921. This site is hosted by CFP and includes a full text newsletter and a description of the network. Uganisha connectivity assistance has been requested for about 20 of the 50 members of the AGUILA network. http://www.idrc.ca/cfp/aguila_e.html

- CFP: Workshop on the Contribution of Urban Agriculture to Food Security in West African Cities (June 15-18/1998), IDRC Project: 004080. Uganisha is assisting in the development of a connectivity plan.

- CFP: Cities Feeding People Contacts, IDRC Project: 004057. From IDRIS: "...The list will also be uploaded to the CFP World Wide Web site."

- CFP: Resource Centre for Urban Agriculture, Animal Husbandry & Forestry (Global), IDRC Project: 003154. From IDRIS: "It will co-fund, through the SGUA's [Support Group on Urban Agriculture] Global Support Facility based at IDRC, the establishment of a global resource centre at ETC International which, in interaction with regional networks, will produce and disseminate a global electronic UA newsletter (regional hardcopies in five languages); hold electronic conferences on selected issues; build and manage a database on UA materials accessible by the Internet and on diskettes; produce a professional and institutional resource directory, reader in five languages, and three selected annotated bibliographies; and manage a homepage on the World Wide Web on SGUA's Global Support Facility activities..."

- CBNRM: Gender, Environment and Sustainable Livelihoods, IDRC Project: 002177. From IDRIS: "... Small research grants will support local field work and analysis, while workshops, electronic bulletin boards and email exchanges of methodological approaches and substantive results will be supported directly through ENGENDER..."

- CBNRM: People and Resource Dynamics in Mountain Watersheds, Hindu Kush-Himalayan (HKH), IDRC Project: 040340. The International Centre for Integrated Mountain Development, (ICIMOD) site contains a project description. <http://www.south-asia.com/icimod/mnr97.htm>

- CBNRM: Community Based Upland Resource Management (Viet Nam), IDRC Project: 938008. Uganisha assistance being provided to establish reliable email and training.

- CBNRM: Farming Systems (Vietnam), Phase II, IDRC Project: 040247. Uganisha assistance being provided to establish reliable email and training.
- CBNRM: Community-Based Mangrove Management (Cambodia), IDRC Project: 040401. Uganisha assistance being provided to establish reliable email and training.
- CBNRM: Vietnam's Forest Challenge (Phase II), IDRC Project: 040384. Uganisha assistance is being provided to establish reliable email (through TMA Co.).
- CBNRM: Local Strategies for Water Supply and Conservation Management (India, Nepal), IDRC Project: 001675. Uganisha is assisting with connectivity (through ICIMOD).
- EcoHealth: Environmental Health Impact Assessment in the Amazon, Phase I & II, IDRC projects: 00380 & 50239. The Programs Branch site includes background, project descriptions, training and courses, conference proceedings and network contacts. Uganisha provided a subsidy to hire a Cuban trainer to provide email and Internet training.
<http://www.geocities.com/RainForest/4672/>
- EcoHealth: Malaria Interventions for Child Survival (Africa), IDRC Project: 001375. The Path Canada Directory is a list of suppliers of insecticides and mosquito nets for sub-Saharan Africa and is text-based (i.e., it is not in a database). <http://www.synapse.net/~path/direct.html>
- EcoHealth: Integrated approaches to safe drinking water (global), IDRC Project: 003329. The "Global Applied Research Network (GARNET) Water Quality Node" site includes a private section for members for discussion and document posting and a list of related sites. Uganisha supported the travel of a consultant to Buenos Aires on behalf of the Water Toxicity project. Uganisha is providing advice for a proposed SchoolNet module. <http://www2.idrc.ca/garnet/>
- EcoHealth: Mapping malaria risk in Africa (MARA), IDRC Project: 002781. The site includes an executive summary of the project, project background, objectives and justification.
<http://www.mara.org.za/>
- EcoHealth: Watertox Users Panel, IDRC Project: 050280. Uganisha assistance with a mailing list to link the institutions has been requested.
- EcoHealth: Research Network in Health Systems and Health Policies for Central America and the Dominican Republic, IDRC Project: 002851 and Health Systems in the Southern Cone of Latin America, IDRC Project: 000403. Uganisha assistance has been requested for a web site.
- EcoHealth: Promoting Sexual Health (Uganda) II, IDRC Project: 003018. Connectivity support has been provided for a researcher.
- EcoHealth: L'apprentissage a distance : les technologies de l'information et de la communication au service de l'éducation de base au Senegal, IDRC Project: 065223. From IDRIS: "...La réalisation des objectifs sera conduite au moyen d'un centre de production de matériel didactique et de leur hébergement sur un site WEB relié à deux centres locaux d'apprentissage situés en zones rurale et péri-urbaine..."
- EcoHealth: Survey on Working Conditions and Health Impact in the Construction Materials Industry (Vietnam); IDRC Project: 003017. Uganisha assistance being provided to establish reliable email and training.
- IPR: African Networking Initiative (ANI), IDRC Project: 002770. Web site includes a database of donors funding telematics projects in Africa. <http://www.bellanet.org/partners/ani/>
- IPR: Gender and Information Technology (APC Women's Networking Support Program), IDRC Project: 001269. The "Global Women's Networking Survey" site includes highlights of the survey findings and a database of women's networking contacts and resources.
<http://community.web.net/apcwomen/>

- IPR: IIC Pre-Conference on New Information & Communication Technologies. October, 1996, Munich, Germany, IDRC Project 003222. A "Communications for Development: Applying Information and Communication Technologies to Development Needs" site was established to record the recommendations, the full text of some of the papers presented at the seminar and relevant materials which can be found elsewhere on the Internet.

<http://dialspace.dial.pipex.com/dmtpruett/pcagenda.htm>

- IPR: Earth Council Information / Communication System, IDRC Project: 001576. The Earth Council's "Earth Network for Sustainable Development" site includes the full text of reports, several searchable databases and a public distribution list. <http://www.ecouncil.ac.cr/>

- Info&Comm: Use of RADARSAT for Natural Resource Management - Costa Rica, Honduras, Panama, Canada, IDRC Project: 001282. The "GlobeSAR 2: Global airborne Synthetic Aperture" site includes a database of projects with images and information about their mid-term conference. <http://www.ccrs.nrcan.gc.ca/ccrs/tekrd/internat/glbsar2/indexe.html>

- Info&Comm: Integrated Conservation Networking System (ICONS), IDRC Project: 002655. The site provides access to database software (based on Microsoft Access 2.0) to manage information on organizations, projects, experts, source materials, laws and other commonly needed information. It has desktop GIS capability. The software is available free of charge to developing country organizations and IUCN members. <http://www.iucn.org/icons/icons.htm>

- Info&Comm: Standard Formats For Recording Human Rights Events, IDRC project: 880175. The "Human Rights Information and Documentation Systems International (HURIDOCs)" site includes a description of the standard formats developed for recording and exchanging information on human rights events and cases. <http://photon-17.iprolink.ch/~huridocs/>

- Info&Comm: Integrated Voice and Data Network (IVDN) - CGIAR, IDRC Project: 002947. From IDRIS: "... The general objective of this project is to develop the IVDN as a global information resource on international agricultural research serving the needs of CGIAR, national agricultural research systems (NARS), and others with common objectives. The project will create Home pages on the world wide web providing access to CGIAR information products; develop CGIAR public awareness information; and provide assistance to NARS who do not yet have access to the Internet for publishing. It will also establish an Internet-based repository of CGIAR information products, including software tools, of interest to NARS, and a mechanism for disseminating these by offline methods; and institutionalize CGIAR's efforts to address system-level needs in the area of information and communications (software licensing, standards, etc.) through the establishment of a CGIAR/NARS fellowship program."

- LCA: - Culture, Éducation et Développement en Afrique, IDRC Project: 003474. An electronic mailing list was established for key actors in education in Africa about strategies for education continent-wide. Some of the participants hired secretaries and research assistants to assist with their participation. A moderator from France and a technician from Toronto were engaged by the project. Final preceding are being prepared.

- LCA: Réseau ouest et centre africain de recherches en Éducation (ROCARE) / Education Research Network for West and Central Africa (ERNWACA), Phase III, IDRC Project: 065231. Uganisha provided email access for several researchers and full Internet access for several researchers.

- LCA: Educational Research Network for Eastern and Southern Africa (ERNESA), Phase III, IDRC Project: 001229. Uganisha is investigating providing connectivity assistance.

- LCA: Environmental Learning in Communities and Schools in Eastern and Southern Africa

(ELP), IDRC Project: 055264. Unganisha provided connectivity assistance to several researchers.

- MIMAP: Monitoring Adjustment and Poverty (MAP) - Phase III, IDRC Project: 002550 and MIMAP - (Philippines) IV, IDRC Project 003239. MIMAP centres will be encouraged to create local web sites. MIMAP Philippine site is quite comprehensive and includes databases of MIMAP and economic indicators. The site for MIMAP Bangladesh is housed at ASRO. <http://www.PanAsia.org.sg/mimap/bd/index.html>; <http://pdfi.pids.gov.ph/mimap/>

- MIMAP: Macroeconomic Adjustment Policies, Health Sector Reform and Access to, Utilization and Quality of Health Care (MapHealth), IDRC Project: 002307. Unganisha assisted in establishing a mailing list and provided copies of Workplace to Workspace book.

- MIMAP - Benin, Burkina Faso, IDRC Project: 003238. Unganisha provided connectivity subsidies to several researchers.

- MIMAP - Nepal, Phase II, IDRC Project: 003393. Unganisha is assisting with connectivity (through ICIMOD).

- Minga: Support to ECOPLATA, IDRC projects: 050224, 50236. The "EcoPlata '96 conference" web site on the LACRO subdirectory includes background papers and the conference declaration. <http://www.idrc.ca/lacro/docs/conferencias/ecoplata.html>

- Minga: RIMISP VII Meeting, IDRC Project: 050197. The "VII Encuentro Internacional de Red Internacional de Metodología de Investigación de Sistemas de Producción (RIMISP)" site includes the full text of the conference proceedings. <http://www.rimisp.cl/rimisp7.htm>

- Minga: SUP Regional Fund for Agricultural Technology (IDB), IDRC Project: 050187. The "Fontagro: The Regional Fund for Agricultural Technology" site includes several full text documents (pdf), a newsletter and their medium term plan, 1998-2000. <http://regionalfund.org/aindex.htm>

- Minga: Projects with the Consortium for the Sustainable Development of the Andean Ecoregion (CONDESAN), especially the InfoAndina project, IDRC Project: 003356, include several moderated mailing lists, training for participants, document publishing, paper distribution methods, and a document management system. <http://www.condesan.org/infoandi/infoandf.htm>

- Minga: Minga Sabbatical Grants, Association of Universities and Colleges of Canada (AUCC), IDRC Project: 050266. The site includes description of grants and application procedures. <http://www.aucc.ca/english/international/program/minga.htm>

- Minga: Competitive Grants Program for Research on Monitoring and Evaluation for Natural Resource Management Projects and Programs in LAC, IDRC Project: 050265. The site consists of the project description. <http://www.rimisp.cl/mrni.html>

- Minga: Sustainable Management of the Uruguayan Coastal Ecosystem ECOPLATA II (Uruguay), IDRC Project: 931551. The site presents very basic project information. <http://www.fisica.edu.uy/pcmya/ecoplata/>

- Minga: Latin American Symposium on Farming Systems Research (IESA)III, IDRC Project: 050321. This is a site for conference information. (Tercer Simposio Latinoamericano Sobre Investigación y Extensión en Sistemas Agropecuarios IESA-AL III). <http://www.rimisp.cl/iesa3.htm>

- PAN assists Internet Service Providers in Asia to provide affordable and sustainable Internet services in their countries; e.g., Project 040345, PAN-Bangladesh <http://www.citechco.net/>; Project 003398, PAN-Bhutan; Project 040277, PAN-Cambodia <http://www.camnet.com.kh/>; Project 040279, PAN-Lanka <http://www.pan.lk/main.html>; Project 040307, Project 040307,

PAN-Laos <http://www.PanAsia.org.sg/la01i000.htm>; Project 040224, PAN-Mongolia <http://www.MOL.mn/>; and Project 040276, PAN-Vietnam. PAN also assists the establishments of Information Servers in Asian developing country institutions to enable electronic publishing and use modern networking technologies; e.g., Project 040320, PINS-Philippines <http://www.dost.gov.ph/>; project PINS-Nepal; and PINS-Vietnam.

- PAN: Bookmarks: Web-based Development Information Reference System - LAC, Project 050311. This system consists of a searchable collection of more than 600,000 web sites managed by OpenText search engine. <http://bookmarks.apc.org/>

- PAN: Community Networking Pilot Projects in Latin America, IDRC Project: 003219. Web sites in Ecuador and Colombia include the project context, objectives, research and impacts as well as descriptions of the 2 components of the project in Ecuador and Colombia. <http://www.redes-comunitarias.apc.org/>

- PAN: *infoDev*: information for development program, IDRC Project: 003110 & 003718. The site lists project proposals as well as approved projects, hosts 2 public discussion lists and has a private section. <http://www.worldbank.org/html/fpd/infodev/>

- PAN: Virtual Business Corridors, IDRC Project: 050300. From IDRIS: "This project will install, test and promote a World Wide Web-based electronic business system based on software (TechnoGate Web) developed by the Canadian Advanced Technology Association (CATA) and known as a "virtual business corridor." Virtual business corridors will be set up in four Latin American countries (Argentina, Brazil, Chile and Uruguay). At least 20 small- to medium-sized, technology-intensive firms from each country will be profiled and given the help they need to design, implement and maintain their own Web pages. They will use the virtual business corridor to enhance their business communications, increase research and development (R&D) cooperation, and promote strategic alliances and partnerships. The initial focus will be on links between the four Latin American countries and Canada, but the corridor will also be available to link Latin American businesses with each other and to TechnoGate partners in other parts of the world. A major component of this project will be groundbreaking research on tools for promoting innovative partnerships using the World Wide Web."

- PAN: Internet Content Development - Papua New Guinea, IDRC Project: 003638. From IDRIS: "This project aims to improve access to international networking and information technologies by Papua New Guinea (PNG)'s research and development community... Specific activities will include forming an Internet Publishing Group representing selected institutions; establishing a training and access facility hosted by the South Pacific Centre for Communication and Information in Development (SPCenCIID) at the University of Papua New Guinea (UPNG); providing selected institutions in the research and development community with modest direct assistance for Internet access and publishing; building the base of PNG Internet-accessible national research data; and providing an avenue for informed discussion of and investigation into pressing issues concerning the Internet in PNG, including remote area access via telecentres and access for women's groups and other non-governmental organizations (NGOs)."

- PAN: Virtual Information Centre for Management Development (India), IDRC Project: 003946. From IDRIS: "...This project will enable ASCI [Administrative Staff College of India] to acquire an Internet browsing and communication facility with a minimum of 6-8 terminals and offer the following services to its clients: a virtual library in support of its training programs, Internet-based information and consultation, list servers, electro bulletins, online registration, and online subscription..."

- PAN: Distance Education - (China) Content, Technological and Business Definitions, IDRC Project: 040416. From IDRIS: "...This project will allow further definition of the content, information and networking technologies, and business arrangements that are prerequisites to preparing the actual project proposal..."
- PAN: Asian NGO Coalition Electronic Network, IDRC Project: 003636. From IDRIS: "...Communication within the network has been mainly limited to the traditional mode, and communication by e-mail has only recently begun among nine members. This project will enable ANGOC [Coalition for Agrarian Reform and Rural Development] to take advantage of the opportunities offered by the Internet in terms of communication and information exchange - including electronic conferencing, electronic publishing and electronic marketing - to strengthen its network activities and enhance its advocacy efforts on identified issues."
- PAN: SME Support Organisations Network - Asia, IDRC Project: 003945. From IDRIS: "...This project will establish an electronic network between Technonet Asia member organisations and develop new information services based on the Internet. The specific objectives are to connect each of the participating institutions to the Internet and develop their capacity to network, thus providing improved information services based on the needs of SMEs. The project will also prepare SMEs for cyber business promotion and help them gain access to international markets through the Internet. A World Wide Website will be set up to help SMEs and their support organisations establish global linkages."
- PAN: Internet for Northern Pakistan, IDRC Project: 004017.
- PAN: Satellite Broadcasting Web Centre for Secondary Schools in Mongolia, IDRC Project: 003810. From IDRIS: "This project will introduce and operate the first educational World Wide Web Centre for Mongolian provincial schools and provide technical assistance for the development of a national information broadcasting network for provincial schools. The project addresses the issues of extending access to information to marginalized social groups, creating Internet materials in a local language, and researching the impact of information and communication technologies on remote communities... Training will be organized at the Public Internet Centre of DataCom Co., Ltd. of Ulaanbaatar. The project will have its own homepage." <http://www.datacom.mn/english/>
- PAN: Web-based audio-visuals on Sustainable Development - Latin America, IDRC Project: 003779. From IDRIS: "...This project will enable the Red de America Latina (RAL), based in Montevideo, Uruguay, to develop a pilot website listing audiovisual documents produced in Latin America on sustainable development. The project will look at the possibility of including samples of the videos on the web. The project will use MINISIS software and its Web interface package."
- PAN: Impact of Information Technology in Rural Areas - India, IDRC Project: 003778. From IDRIS: "...This project will assess the impact of information and communication technologies on the transition to sustainable agriculture and rural development. It will also document their role in promoting knowledge-empowerment in rural families. Researchers will set up six village information shops providing e-mail and World Wide Web access, and operated by educated youth, especially women..."
- PAN: Rural Development Communications Network, IDRC Project: 003637. From IDRIS: "...This project will provide an electronic communication platform by connecting the rural development ministries of CIRDAP's member countries and their designated research and development institutions, to the Internet... This project will test e-mail and Internet access at the

two divisional libraries and establish linkages with CDL's central office; publish an electronic journal on development issues; organize e-mail and Internet user training in the divisional centres and central office of CDL; and establish a website of CDL publications."

- PAN: PAN - Vietnam National Intranet, IDRC Project: 040342. Unganisha assistance being provided (through TMS Co.) to establish reliable email and training. From IDRIS: "...The project will strengthen ... their capacity in information management and service, and Intranet and Internet publishing; and sensitize potential governmental and nongovernmental R&D organizations to Intranet information networking and obtain their active participation to develop a national web site of Vietnamese R&D research information and publications."

- PAN: PAN - APCC Coconut Information Network, IDRC Project: 040341. From IDRIS: "...The project will provide electronic mail (e-mail) and Internet access to APCC [Asian and Pacific Coconut Community] member institutions and assist national programs by providing training for national coconut information specialists. Coconut-related information will be packaged for publication on the World Wide Web; a pilot program of electronic publishing and on-line access to APCC databases will be developed; and the cost and benefits will be determined. The project will also test e-mail and Internet connectivity with selected stakeholders (researchers, producers, policymakers, processors, etc.) to determine future needs; and develop and test the efficiency of computer conferences for discussions between APCC member institutions and stakeholders."

- PAN: Electronic Networking for Sustainable Mountain Development (ICIMOD), IDRC Project: 040278. From IDRIS: "...This project will develop a network of research and development institutions in Nepal based on the Internet and linked to the Pan Asia Network (PAN) Program of IDRC... The project will develop capacity within each participating institution to collect and process information for publishing on the Internet. It will constitute a resource team of networking experts in Nepal able to provide leadership and support to networking activities. A web site for Nepalese research and development publications and other information will be developed and linked to PAN and other regional/international networks. Also, the project will provide a demonstration or "drop-in" Internet site at ICIMOD to promote the use of Internet in the country."

- PAN: Expanding Audience & Capacity of Electronic Networks for Sustainable Development, IDRC Project: 003001. The site includes some full text documents and many links to resources on partner sites. From IDRIS: "The project will place special emphasis on several links with developing regions and Eastern Europe. IISD will seek more animated use of World Wide Web sites through improved consideration of design, user dialogue, and better information filtering. Project participants will develop the initial network of cooperating organizations; design and implement an interactive interface and tools to help decision-makers make optimal use of the information provided through the network; expand the knowledge base through linkages to information resources held on-line by key organizations around the world; and balance the knowledge base with input from regions throughout the world."

<http://sdgateway.net/>

- PAN: Unganisha: The connectivity project, IDRC Project: 003192. Unganisha maintains a web-to-email gateway; published the book: "From Workplace to Workspace: Using Email Lists to Work Together", produced an inventory of IDRC project web sites; initiated the roaming email services (now managed by MIS); provides technical advice, training and subsidies for connectivity to IDRC project recipients and PIs; is establishing Help Desks in several African

countries for use by IDRC project recipients; is producing a modular Internet training package for IDRC project recipients with emphasis on training the local trainers; is preparing an overview of Internet technologies with emphasis on the use of the technologies by IDRC project recipients and PIs; is conducting a survey of Internet use by IDRC staff and projects; is preparing a resource kit for universities in developing countries to get connected to the Internet; and is testing connectivity technologies; e.g., LINUX server, handheld computers, chat services and videoconferencing. <http://www.idrc.ca/unganisha>

- PAN: A Network for Research on Software Tools for Land Management (HUMUS Network), IDRC Project: 003865. The "HUMUS Network: Software for Land Management" site will include a database of network members. Uganisha assisted the HUMUS network to develop a project proposal using the Internet; to establish a web site on an IDRC server and with a mailing list humus-cl. <http://unganisha.idrc.ca/humus/>

- PBR: Environmental Policy Initiative: Phase I, IDRC Project: 003746. From IDRIS: "...The outputs will be disseminated through policy submissions, fact sheets for both communities and decision-makers, teaching guides, a World Wide Web page and workshops."

- PBR: Global Internally Displaced Persons Survey, IDRC Project: 003733. From IDRIS: "...produce an annual worldwide survey and analysis of IDP issues, and a quarterly newsletter; build a country-by-country database of IDPs; maintain a website; and build a network of interested non-governmental organizations (NGOs), multilateral agencies, research institutes and individuals. The overall aim is to identify and document serious situations, develop methodologies for the collection of accurate statistics, and alert the international community to the worldwide status of IDPs."

- PLAW: Electronic Conference on Livestock Environment Interactions - GLOBAL, IDRC Project: 003269. This document describes the lessons learned from a global electronic conference: "Guidelines For Organizing An Electronic Conference: Lessons From The Global Consultation on Balancing Livestock, Environment, and Human Needs" which involved more than 1,000 participants. http://www.idrc.ca/unganisha/document/global/index_e.html

- PLAW: Soil Improvement in Africa: Potential Role of Ramial Chipped Wood Workshop, IDRC Project: 003809. The site, "Projet d'implantation de la technologie des BRF en Afrique : développement et recherche en agroforesterie appliqués à l'agriculture et à la forêt", consists of the project report in .pdf. <http://forestgeomat.for.ulaval.ca/brf/>

- SMMEIT: "A project in Southern Africa is already working to establish electronic links among key enterprise support institutions, while in Egypt support to the newly-established Egyptian Small Enterprise Association will for the first time provide a forum for interaction between researchers, NGOs and government agencies active in the field."

- SMMEIT: Support for Bednets - TDR & NetGain Africa ITN Task Force, IDRC Project: 003229 & 003390. The site, "Work plan of the Task Force on Operational Research on Insecticide-impregnated Bednets, January 1998, UNDP/World Bank/WHO Special Programme for Research & Training in Tropical Diseases (TDR)", includes rationale, objectives, technology, implementation, promotion, expected outcomes, possibilities for collaboration, and work plan. Path Canada also has a site: "Net Gain for Africa Task Force: Increasing the availability of insecticide-treated nets for malaria control in sub-Saharan Africa through public-private partnerships". <http://www.who.ch/tdr/workplan/1997/bednets.htm> & <http://www.synapse.net/~path/nete.html>

- SMMEIT: Malaria Interventions for Child Survival (Africa), IDRC Project: 001375. PATH

Canada's "Malaria Control" site includes a bilingual full-text newsletter, project descriptions and a directory of suppliers of insecticides and mosquito nets for sub-Saharan Africa.

<http://www.synapse.net/~path/malaria.html>

- SMMEIT: Industrial Restructuring, Innovation & International Competitiveness in Latin America, Ph II, IDRC Project: 003077. The site, "Reestructuración industrial, innovación y competitividad internacional en América Latina", consists of a project description.

<http://www.eclac.cl/english/Projects/ctpd/can97s25.html>

- SMMEIT: SMME Support Institutions Network - Southern Africa, Project: 002842. The project will provide each of the institutions in the network with e-mail and, as it becomes available, Internet access.

- SMMEIT: URR IDRC and International Federation of Institutes for Advanced Study (IFIAS) Knowledge-Brokering Initiative: Pilot Study, IDRC Project: 003224. This site has Internet, intranet and extranet capabilities, includes public and private mailing lists, and is structured to encourage information exchange; however, the site is almost empty and inactive.

<http://www.knowledge.broker.org/>

- SUB: The Crucible Project: Alternative Legislation on Intellectual Property Rights II (Global), IDRC Project: 004015. This project is in the process of establishing an electronic discussion group.

- SUB: Community Biodiversity Development and Conservation Program, IDRC Project: 00813. The Rural Advancement Foundation International (RAFI) site, "Enclosures of the Mind Intellectual Monopolies: A Resource Kit on Community Knowledge, Biodiversity, and Intellectual Property" consists of an 88 page document in .pdf.

<http://www.rafi.ca/rafi/eotm/index.html>

- SUB: Medicinal Plants Network Phase II, IDRC Project: 045021. The site, "IDRC Medicinal Plant Network (IMPEN)", includes general information about the project.

<http://www.idrc.org.sg/biodiversity/impn.html>

- SUB: Indigenous Biodiversity Information Network (IBIN) (Global), IDRC Project: 003247. The site, "Indigenous Peoples Biodiversity Information Network (IBIN)", includes several public discussion fora which have been very inactive, there are several unconnected lists of links and many of the sections are blank; e.g., news (since May 1997), databases, library, projects and contacts. <http://www.ibin.org/>

- SUB: TRAMIL: Central American Network on Medicinal Plants, Phase II, IDRC Project: 003233. The site ENDA-Caribe site, "TRAMIL: Programa de investigación aplicada a la medicina popular del Caribe", includes project information.

<http://www.funredes.org/endacaribe/Tramil.html>

- SUB: Publication of Report on Non-Timber Forest Products, IDRC Project: 004105. From IDRIS: "...This grant will finance the updating and publication of the book on IDRC's World Wide Web site as one of the Centre's Focus Series. The title of the publication will be "Non-timber Forest Products: a Production to Consumption Systems Approach to the Literature.""

- SUB: Participatory Plant Breeding in High Altitude Villages of Nepal, IDRC Project: 003094. Uganisha is assisting with connectivity (through ICIMOD).

- TEC: African Economic Research Consortium - Phase IV, IDRC Project: 003161. The site includes general information about the consortium.

<http://www.tomco.net/~edinp/africa/aerc.htm>

- TEC: Economics and the Environment (Colombia) & Macroeconomic Research Network (Latin America) IV , IDRC Projects: 000763 & 002879. The site, "FEDESARROLLO: Fundacion para la Educacion Superior y el Desarrollo", includes basic information about the foundation their publications and upcoming conferences and seminars.
<http://www.openway.com.co/fedesarrollo/>
- TEC: G-24 Technical Support Service III, IDRC Project 002881. Some publications are listed with order information. <http://www.unicc.org/unctad/en/pressref/primfi.htm>
- TEC: Finance and Changing Trade Patterns in Developing Countries, IDRC Project: 003252. Uganisha is assisting with an upgrade to the LAN of Centro de Estudios de Estado y Sociedad (CEDES) and with connectivity.
- TEC: Secretariat for Institutional Support for Economic Research in Africa (SISERA), IDRC Project: 065077. Uganisha is investigating Internet access via the LANs for several member institutes.
- TEC: Issues in International Trade Relations - Latin America, IDRC Project: 003392. From IDRIS: "...The compiled results will be made available to as large an audience as possible. Policymakers, academics, researchers and civil society organizations will have access to the results via the traditional printed mediums (book, policy papers and newsletters), as well as electronically through the Internet." Uganisha is assisting with connectivity.
- TEC: Trade and Sustainable Development Knowledge Network, IDRC Project: 003460. The site, "Knowledge Networks: Capacity Building for Trade and Sustainable Development", contains basic information about the project with a link to a .pdf version of the complete proposal. From IDRIS: "...This first-phase activity will include country studies and workshops, thematic papers, and networking through the Internet... The third part will consist of construction and maintenance of a knowledge network on trade and sustainable development. The major collaborators will consolidate existing information online, adding to it where gaps exist, and link the research partners with each other via the Internet."
<http://iisd1.iisd.ca/trade/knownet.htm>
- MISC: Corneal Infections (Nepal) III, IDRC Project: 001214. Uganisha is assisting with connectivity at Tribhuvan University (through ICIMOD).

Projects with connectivity componants--Corporate Services Branch

- Publications: Mise à jour du serveur web, IDRC Project: 003262. From IDRIS: "Cette activité de soutien à la recherche vise à couvrir les frais relatifs à la rédaction, à la révision, à la traduction, à l'illustration mais surtout au formatage pour le site Web de pages Électroniques sous la responsabilité directe ou indirecte des Éditions du CRDI. L'objectif d'ensemble est de maintenir à jour l'information sur le CRDI et de s'assurer que l'image du Centre est maintenue et que la qualité de l'information répond aux standards d'excellence de l'institution."
- SIP: Corporate Citizenship Grants 1997-98, IDRC Project: 003490; e.g., (1) The site, "African media in the face of democratic transition, 24-25 April, 1997" includes an electronic forum.
http://www.vuesdafrique.org/colloque/colloque_eng.html; (2) The site, "In Common: Multi-sector Directory of BC Global Organizations and Resources", includes a comprehensive directory organized under several different headings.
<http://place2b.org/bccicweb/incommon/index.htm>; and (3) The site, "Sustainability Issues Forum at the APEC People's Summit", includes forum and workshop summaries, a bibliography and a

photo gallery. <http://place2b.org/bccicweb/sifweb/index.html>

- SIP: Connecting to the World Partnership Grants: 1997-98, IDRC Project: 003613; e.g., (1) Canadian Centre for International Studies and Cooperation (CECI). A web site was developed. <http://www.ceci.ca/ceci/info/eng/index.htm>; (2) The site for the "Global Change Game" includes a tour schedule and information about hosting and participating in the game.

<http://www.mbnet.mb.ca/lucas/gcg/index.html>; and (3) United Nations Association in Canada (UNAC), IDRC Project: 003613. A web site was developed which includes a current events calendar, full text newsletter and links to related sites. "<http://www.unac.org/>

- SIP: CASID/CJDS Partnership Grant: 1996/99, IDRC Project: 002973. The Canadian Association for the Study of International Development (CASID) was developed to explore the use of electronic communications. <http://www.casid-acedi.ca/fronteng.html>

- SIP: Fempress: Internetting Women's Press in Latin America, IDRC Project: 003443. The web site, "fempress: Red de Comunicación Alternativa de la mujer", was developed as part of the project and includes a full text journal and a searchable database of articles.

<http://www.fempress.cl/>

- SIP: New Generation of Development Scholars and Practitioners: Phase III, IDRC Project: 003287. From IDRIS: "...The specific objectives are to provide field experience in a Canadian context for students for credit; introduce students and faculty to the use of the World Wide Web (WWW) and its applications; examine the issues surrounding information technologies for development; and develop self-sustainable and flexible mechanisms for student and instructor communication and resource production."; e.g., International Development Studies Network (IDSNET). This site was developed to encourage networking among international development studies programs in Canada. It includes an electronic discussion group, full text documents, lists of links, student and faculty contacts, news and an electronic essay contest. The discussion group is not very active. <http://www.idsnet.org/>

- SIP: Canadian Partnerships on Global and Emerging Issues: 1997-98, IDRC Project: 003530; e.g., The site for "A Forum on International Financial Institutions in the 21st Century, October 17 and 18, 1997, University of Alberta, Edmonton", includes conference information. <http://admin1.intlcent.ualberta.ca/ForumIFI/>

- SIP: CIDA/Refugee Working Group, IDRC Project: 920801. This project produced the Palestinian Refugee ResearchNet site which includes many full text documents, links to related sites, mailing lists and news. <http://www.arts.mcgill.ca/mepp/prn/prfront.html>

- SIP: Canada-Latin America Research Links (AUCC), IDRC Project: 002624. The Association of Universities and Colleges of Canada site, "Research Cooperation Programme between Canada and Latin America", includes grant application procedures and descriptions. <http://www.aucc.ca/english/international/program/indexe.htm>

- SIP: Canadian Sabbatical to Africa - AUCC, IDRC Project: 003456. The "Sabbatical Grants for Africa" site includes grant application procedures and descriptions. <http://www.aucc.ca/english/international/program/africa.htm>

- SIP: Corporate Citizenship Grants 1996-97, IDRC Project: 003055; e.g., The site, "Vglobe Teaching Globally for a Sustainable Future", includes Global Issues Resource Index of a variety of activities to enrich the global classroom and links to related sites. <http://www.islandnet.com/vglobe/>

- SIP: World Commission on Forests for Sustainable Development: Report on North American Public Hearings, IDRC Project: 003481. The site includes highlights of the report.

<http://iisd1.iisd.ca/wcfsd/winnipeg.htm>

- SIP: WUSC- IDRC Student Exchange for Enhanced Knowledge (SEEK): A Proposal, IDRC Project: 003426. This World University Service of Canada site includes grant application procedures and descriptions. <http://www.wusc.ca/campus/campus.html#SEEK>
- SIP: CGIAR National Support Organization in Canada, IDRC Project: 003470. From IDRIS: "...communicating the results of these activities to interested Canadian scientists via a newsletter and the Internet."
- SIP: Science, Religion and Development, IDRC Project: 003309. Unganisha assisted in providing one of the researchers with email.